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Introduction

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MUNICIPAL RECORDS MANAGEMENT MANUAL

FOREWORD

City and town government in Massachusetts has given the Commonwealth a proud heritage. Throughout its history Massachusetts local government has performed vital functions in the safeguarding of citizens' constitutional rights, the protection of persons and property, the regulation of business and utilities, the performance of public works, the maintenance of public solvency, and the provision of health, educational, social and recreational services. The knowledge and awareness of this heritage will be ensured by the preservation of the records which document it. The professional management of the local government records of the Commonwealth will safeguard that information which is vital to administrative efficiency, fiscal accountability, the legal rights of citizens and, by no means least, the local history of the Commonwealth. It is to that end that this **Manual** is dedicated.

The professional staff of my office has produced the **Massachusetts Municipal Records Management Manual** as a guide for local records custodians in the maintenance of records under their care. The **Manual** contains advice and guidance in the development of programs of records management in its major components: the organization of records including the inventorying and appraisal of records; the disposal of records which have become valueless and obsolete; the administration of access to public records, the proper care of machine readable records, the microfilming of records in order to enhance the security of vital information and streamline the retrieval of high-volume records series; the protection and security of records by means of fire-resistive equipment and procedures to safeguard records against theft and vandalism; and the conservation of records in order to ensure the longevity of the physical integrity of permanent or archival records.

It is my pleasure to present to the cities and towns the **Municipal Records Management Manual**. Its use will assist the cities and towns in the twin goals of improving management by improving records management, and preserving the vital information of our historic past.

MICHAEL JOSEPH CONNOLLY
Secretary of State

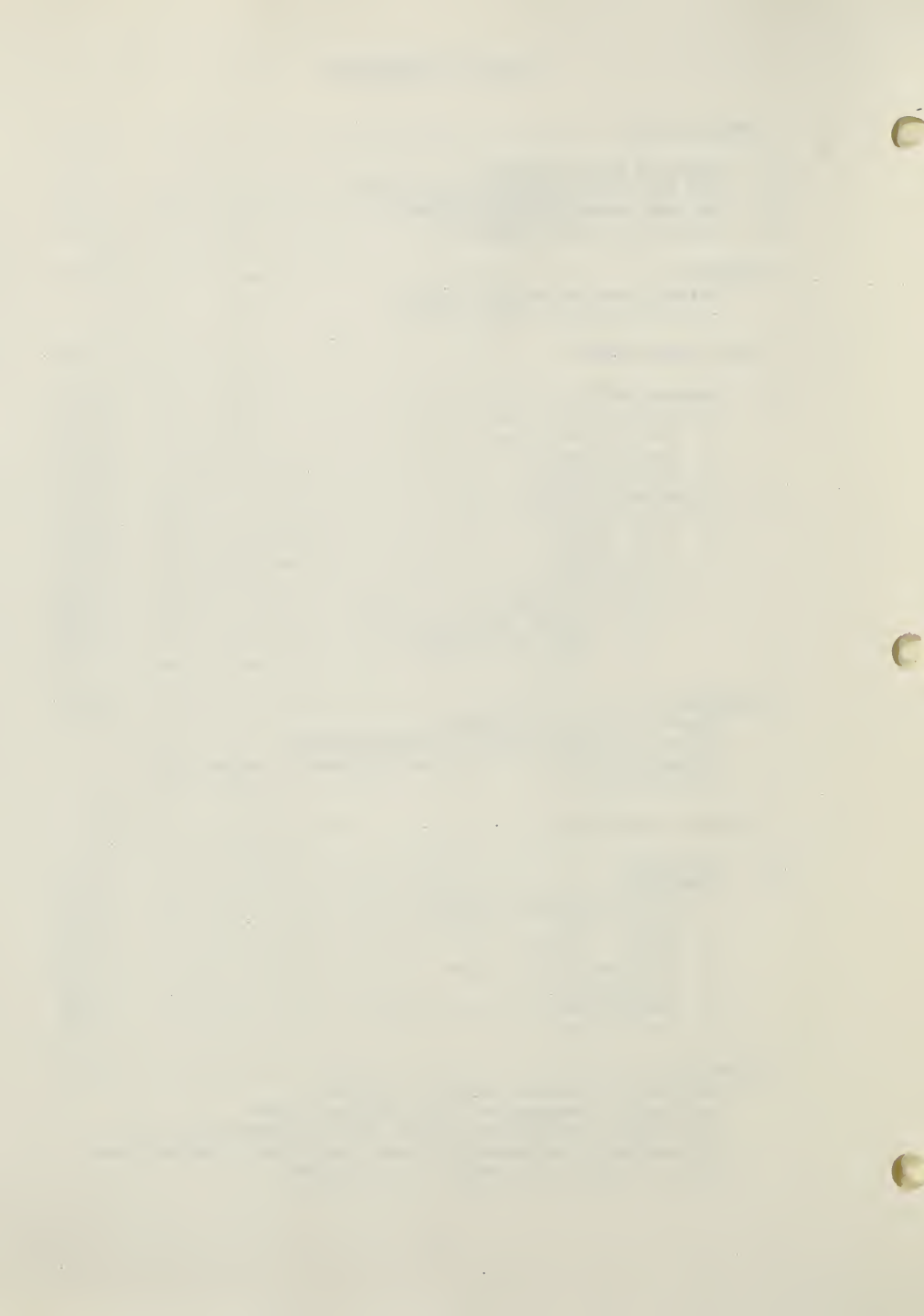


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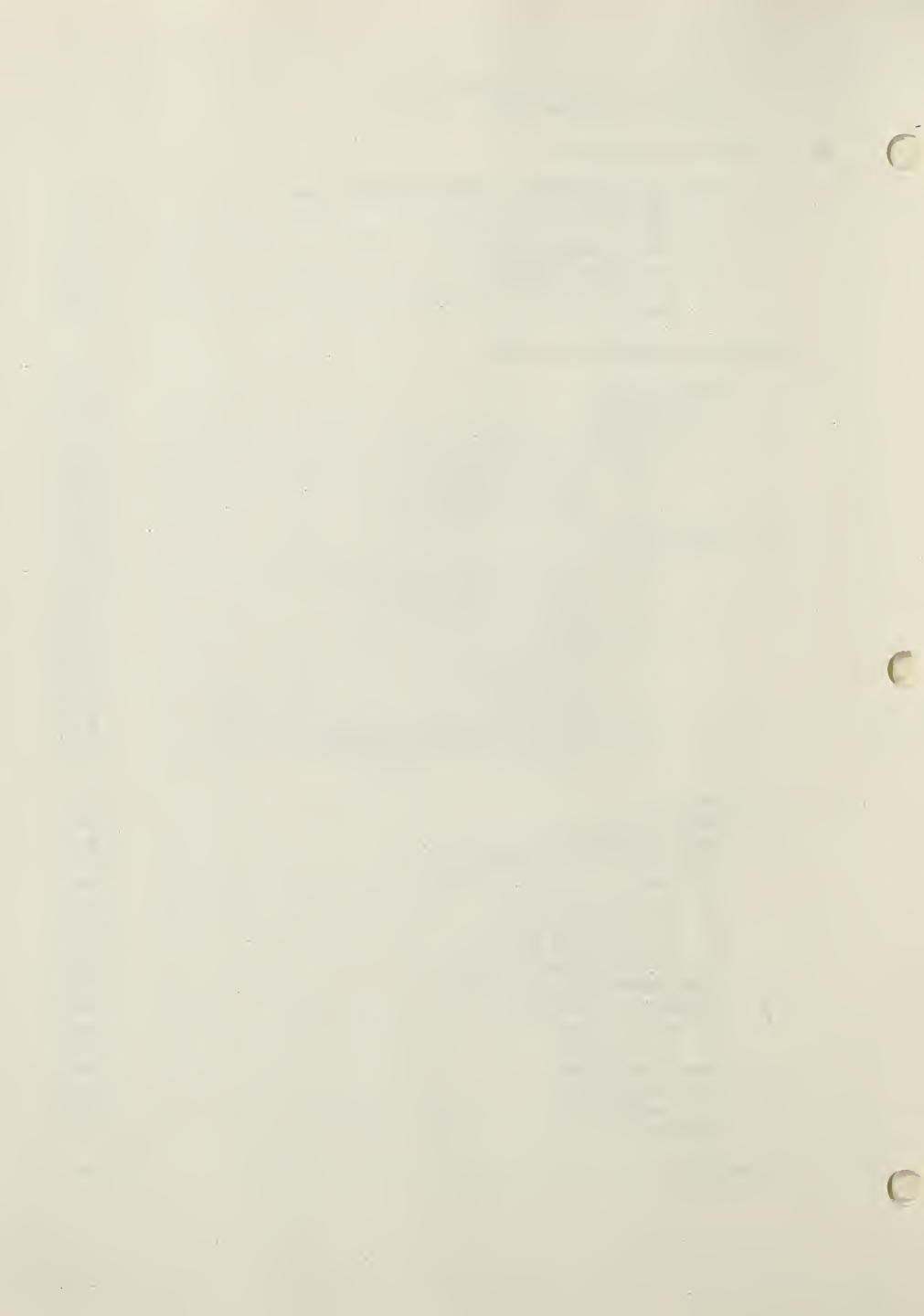
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SUPERVISOR OF PUBLIC RECORDS
Municipal Records Management Manual

INTRODUCTION

All units of government have at least one thing in common: their need for information. Information, like any vital resource, carries a price. In 1987, the cost of producing the records in one four-drawer filing cabinet was estimated at approximately \$13,500.00. That figure does not include the cost of maintaining the information or the cost of reconstructing the information if it were lost or damaged. We all document our ideas and activities, and collect and maintain data to better serve our constituents and fulfill our duties.

Information has more than simply a financial value; it has a profound effect on our ability to perform our mandated tasks. Imagine having no memoranda, no reports, incoming or outgoing correspondence, no client or project files, no subject files... how well could you do your job?

A. MANDATE AND SERVICES

The importance of records in public business has long been recognized by the legislature. The history of state records management services for local government in the Commonwealth may be traced back to an 1884 resolve by the General Court calling for a report on public records. The original resolve was extended in 1889 and led to the creation of a permanent position of Commissioner of Public Records by chapter 333 of the Acts of 1892. This act was the basis of what has become M.G.L.A. c. 66, the Public Records Law (see Appendix).

Under the provisions of chapter 66, the Supervisor of Public Records has the responsibility to "take necessary measures to put the records of the commonwealth, counties, cities and towns in the custody and condition required by law and to secure their preservation." A team of professionals has been assembled under this authority to assist municipal government in managing records in an efficient, economic and secure manner. Services of the Records Management Unit include consultation on storage, arrangement, preservation and disposition of records; assistance in analyzing the feasibility of microfilming programs; inspection of vaults and storage areas; and review of files management and other records management practices. Records management analysts also conduct training for local officials both in municipalities and at the their offices in the Massachusetts Archives at Columbia Point.

Chapter 66 also includes provision for the public inspection of records. When providing public access to records, chapter 66 and access regulations promulgated pursuant to it (950 CMR

32.00), and M.G.L.A. c. 4, s. 7, clause 26, which describes records which are exempt from public access, should be considered. The Supervisor provides assistance to records custodians and the public in this area through the Intervenor Team of the Public Records Division. The division can be reached at 727-2832.

B. THE RECORDS MANAGEMENT PROGRAM

The objective of records management is to decrease operational costs and increase productivity. This is accomplished through control of the records lifecycle.

Records will have a lifecycle, whether it is controlled or not. Records will be created and used, and will eventually be discarded; adding control to the formula, however, means that records will be created, used and maintained in the most efficient manner possible and that they will be discarded on a regular basis when they are no longer useful. Records will flow from creation to disposition without the records crises that plague offices that are out-of-control.

A records management program should examine the records that are being created. Do they contain the information needed by users? are they in the appropriate format and medium? It should examine the maintenance of records after creation. Are these records arranged in an accessible manner? are they protected from environmental hazards and unauthorized access? And the records management program should examine the disposition of records. Are records retained for the full period of time they are required by users? are obsolete records promptly destroyed, thus saving the cost of space and equipment needed to store them?

C. THE RECORDS MANAGEMENT BY-LAWS

Many of the records-related problems experienced by municipalities-- overcrowded vaults, unretrievable information, attics turned into fire traps-- are the result of sporadic and uncoordinated records management. While it is necessary that each department look to its own records and secure their safe storage and proper disposition, a centralized records management program can alleviate many problems.

A number of towns within the Commonwealth have instituted their own local records management programs. It should be noted that none of these were envisioned as one-time clean ups of existing problems, but as part of a coherent long-term program, for gaining control over their records and managing the information needs of the municipality. Such programs can provide invaluable assistance in clearing working offices of inactive records, facilitating the timely and orderly disposition of obsolete and otherwise unneeded records, and in rationalizing records storage to maximize existing space and minimize turf battles arising for the same reason.

To be successful, any local records management program needs a firm operational basis to ensure its institutionalization and to guarantee that it will receive the cooperation of the various municipal officers. To achieve this end, the program should be founded in a municipal by-law or ordinance. The by-law or ordinance should clearly define the goals of the program, what "records" are to be managed (in terms of c. 4 and 66 of the General Laws), and the general methods by which the program will achieve its goals. Provision should be made in the by-law or ordinance for the naming of a records manager or other head of the program and the program itself should be established as an independent entity answerable to the chief administrative unit of the municipality. The program head's duties and authority should be well delineated in the ordinance; this might include a grant of plenary authority over storage space in the vault or control of the microfilm program.

In some municipalities, and particularly in the larger ones, it may be desirable to provide for an advisory board to be constituted of various department heads and representatives of administration to assist the program head in scheduling of records, space allocation and other policy decisions. To be effective, the board should be kept as small as possible; membership may be made on a revolving basis to avoid conflicts among officers and the program head.

D. PURPOSE OF THE MANUAL

Our aim in compiling and distributing this manual is to provide you with the theory, standards and guidelines you need to establish and maintain an effective records management program in your municipality. The manual is designed as a quick reference guide and so is organized by topic. It is in ring-binder format in order to facilitate periodic updating and in anticipation of the addition of new sections.

Locating information you need, when you need it, is at the heart of records management. The section "Files Management" can help you to analyze the strengths and weaknesses of your file system and how to improve it.

The "Disposition" section will be quite useful to any official who has custody of records. It describes the inventory process, the first step in gaining control of records. It also contains Records Retention Schedules for twenty-two municipal offices. These schedules list records series titles and their retention periods. When the retention periods of records expires, custodians can obtain permission from the Supervisor to destroy them. A sample letter to request permission is also included here.

"Access to Public Records" is of vital interest to every government official. This section, contributed by the Public Records Division, describes the provisions for public access

that must be made, information that is exempted from access and the process for appeal.

The section "Machine Readable Records" is important for those municipalities which create and maintain information on computer. These records, called machine readable records, are public records and must be properly managed just as any public records, regardless of format.

Municipalities considering the establishment of a microfilm program should review the "Microfilm" section. It includes the regulations on using microfilm promulgated by the Secretary of State.

Of universal interest is the section on "Security." It provides information about standards for vault construction and guidelines for maintenance of storage areas as well as information about disaster preparedness.

In addition to caring for current records, public records custodians are also responsible for the preservation of records. The section on "Conservation" includes information on the causes of deterioration and how you can prolong the life of records in your custody. It is hoped that records custodians will find this publication to be a useful, informative and effective tool in facilitating the vital tasks of government. We are eager to hear your questions and comments; please let us know how we can be of assistance to you.

APPENDIX

Massachusetts General Laws
Public Records: Chapter 66

SUPERVISOR OF PUBLIC RECORDS
Municipal Records Management Manual

PUBLIC RECORDS
Chapter 66.

Duties of Supervisor of Public Records; Keeping and Preservation

Section 1. The supervisor of public records, in this chapter called the supervisor of records, shall take necessary measures to put the records of the commonwealth, counties, cities or towns in the custody and condition required by law and to secure their preservation. He shall see that the records of churches, parishes or religious societies are kept in the custody and condition contemplated by the various laws relating to churches, parishes or religious societies, and for these purposes he may expend from the amount appropriated for expenses such amount as he considers necessary. The supervisor of records shall adopt regulations pursuant to the provisions of chapter 30A to implement the provisions of this chapter.

Section 2. Repealed, 1977, 80, Sec. 1.

"Record" Defined; Quality of Paper Required; Record Made by Photographic or Micrographic Process.

Section 3. The word "record" in this chapter shall mean any written or printed book or paper, or any photograph, microphotograph, map or plan. All written or printed public records shall be entered or recorded on paper made of linen rags and new cotton clippings, well sized with animal sizing and well finished, or on one hundred per cent bond paper sized with animal glue or gelatin and preference shall be given to paper of American manufacture marked in water line with the name of the manufacturer. All photographs, microphotographs, maps and plans which are public records shall be made of materials approved by the supervisor of records. Public records may be made by handwriting, or by typewriting, or in print, or by photographic process, or by the microphotographic process, or by any combination of the same. When the photographic or microphotographic process is used, the recording officer, in all instances where the photographic print or microphotographic film is illegible or indistinct, may make, in addition to said photographic or microphotographic record, a typewritten copy of the instrument, which copy shall be filed in a book kept for the purpose. In every such instance the recording officer shall cause cross references to be made between said photographic or microphotographic record and said typewritten record. If in the judgment of the recording officer an instrument offered for record is so

illegible that photographic or microphotographic record thereof would not be sufficiently legible, he may, in addition to the making of such record, retain the original in his custody, in which case a photographic or other attested copy thereof shall be given to the person offering the same for record, or to such person as he may designate.

Subject to the provisions of sections one and nine, a recording officer adopting a system which includes the photographic process or the microphotographic process shall thereafter cause all records made by either of said processes to be inspected at least once in every three years, correct any fading or otherwise faulty records and make report of such inspection and correction to the supervisor of records.

Certain Appliances Forbidden.

Section 4. No ink shall be used upon any permanent public record except ink of such a standard as established and approved by the supervisor of records, and no ribbon, pad or other device used for printing by typewriting machines, or stamping pad, or any ink contained in such ribbon, pad, device, stamping pad or carbon paper, shall be used upon any permanent public record, nor shall any photographic machine or device or chemical used in connection therewith be used in making any permanent public record, except such as has been approved by the supervisor of records, who may cancel his approval if he finds that any article so approved is inferior to the standard established by him. The supreme judicial or superior court shall have jurisdiction in mandamus, on petition of the supervisor of records and pursuant to section five of chapter two hundred and forty-nine, to order compliance with the provisions of this section.

Copies of Records of Counties, Cities and Towns.

Section 5. County commissioners, city councils and selectmen may cause copies of records of counties, cities or towns, of town proprietaries, or proprietors of plantations, townships or common lands, relative to land situated in their county, city or town or of easements relating thereto, to be made for their county, city or town, whether such records are within or without the commonwealth, and such records within the commonwealth may be delivered by their custodians to any county, city or town for such copying. City councils and selectmen may also cause copies to be made of the records of births, baptisms, marriages and deaths kept by a church or parish in their city or town.

Information to Be Recorded by Records Required to Be Kept under Certain Statutes.

Section 5A. The records, required to be kept by sections eleven A of chapter thirty A, nine F of chapter thirty-four and twenty-three B of chapter thirty-nine, shall report the names

of all members of such boards and commissions present, the subjects acted upon, and shall record exactly the votes and other official actions taken by such boards and commissions; but unless otherwise required by the governor in the case of state boards, commissions and districts, or by the county commissioners in the case of county boards and commissions, or the governing body thereof in the case of a district, or by ordinance or by-law of the city or town, in the case of county boards, such records need not include a verbatim record of discussions at such meetings.

Custody of Departmental, etc., Records.

Section 6. Every department, board, commission or office of the commonwealth or of a county, city or town, for which no clerk is otherwise provided by law, shall designate some person as clerk, who shall enter all its votes, orders and proceedings in books and shall have the custody of such books, and the department, board, commission or office shall designate an employee or employees to have the custody of its other public records. Every sole officer in charge of a department or office of the commonwealth or of a county, city or town having public records in such department or office shall have the custody thereof.

Custody of Ancient and Certain Other Public Records.

Section 7. Every town clerk shall have the custody of all records of proprietors of towns, townships, plantations or common lands, if the towns, townships, plantations or common lands, to which such records relate, or the larger part thereof, are within his town and the proprietors have ceased to be a body politic. The state secretary, clerks of the county commissioners and city or town clerks shall respectively have the custody of all other public records of the commonwealth or of their respective counties, cities or town, if no other disposition of such records is made by law or ordinance, and shall certify copies thereof.

Preservation of Certain Books, Papers and Records; Destruction of Certain Original Instruments.

Section 8. Every original paper belonging to the files of the commonwealth or of any county, city or town, bearing date earlier than the year eighteen hundred and seventy, every book of registry or record, except books which the supervisor of public records determines may be destroyed, every town warrant, every deed to the commonwealth or to any county, city or town, every report of an agent, officer or committee relative to bridges, public ways sewers or other state, county interests not required to be recorded in a book and not so recorded, shall be preserved and safely kept; and every other paper belonging to such files shall be kept for seven years

after the latest original entry therein or thereon, unless otherwise provided by law or unless such records are included in disposal schedules approved by the records conservation board for state records or by the supervisor of public records for county, city or town records; and no such paper shall be destroyed without the written approval of the supervisor of records. Notwithstanding the foregoing, the register of deeds in any county may, without such written approval, destroy any papers pertaining to attachments or to the dissolution or discharge thereof in the files of his office following the expiration of twenty years after the latest original entry therein or thereon, unless otherwise specifically provided by law, and he may destroy all original instruments left for record and not called for within five years after the recording thereof.

Destruction of Certain Records by City, etc., Clerks

Section 8A. Any provision of general or special law to the contrary notwithstanding, the clerk of any city or town, with the written approval of the supervisor of records, may destroy any index of instruments made by any clerk of such city or town under the provisions of law now embodied in section 15 of chapter 41, or any original record made by any such clerk under any of the provisions of law now embodied in section eleven of chapter two hundred and nine, section three of chapter two hundred and fifty-five, or any similar statute; provided, that such index or record, as the case may be, has been, or shall have been, micro-photographed, and that twenty years has, or shall have expired after the making of such index or record. The micro-photograph of any index or record so destroyed shall have the same force and effect as the original index or record from which such micro-photograph was made.

Preservation and Copying of Worn, etc., Records.

Section 9. Every person having custody of any public record books of the commonwealth, or of a county, city or town shall, at its expense, cause them to be properly and substantially bound. He shall have any such books, which may have been left incomplete, made up and completed from the files and usual memoranda, so far as practicable. He shall cause fair and legible copies to be seasonably made of any books which are worn, mutilated or are becoming illegible, and cause them to be repaired, rebound or renovated. He may cause any such books to be placed in the custody of the supervisor of records, who may have them repaired, renovated or rebound at the expense of the commonwealth, county, city or town to which they belong. Whoever causes such books to be so completed or copied shall attest them, and shall certify, on oath, that they have been made from such files and memoranda or are copies of the original books. Such books shall then have the force of the original records.

Records Open for Public Inspection.

Section 10. (a) Every person having custody of any public record, as defined in clause Twenty-sixth of section seven of chapter four, shall, at reasonable times and without unreasonable delay, permit it, or any segregable portion of a records which is an independent public record, to be inspected and examined by any person, under his supervision, and shall furnish one copy thereof upon payment of a reasonable fee. Every person for whom a search of public records is made shall, at the direction of the person having custody of such records, pay the actual expense of such search. The following fees shall apply to any public record in the custody of the state police, the Massachusetts Bay Transportation Authority police, the metropolitan district commission police or any municipal police department or fire department: for preparing and mailing a motor vehicle accident report, five dollars for not more than six pages and fifty cents for each additional page; for preparing and mailing a fire insurance report, five dollars for not more than six pages and fifty cents for each additional page; for preparing and mailing crime, incident or miscellaneous reports, one dollar per page; for furnishing any public record, in hand, to a person requesting such records, fifty cents per page. A page shall be defined as one side of an eight and one-half inch by eleven inch sheet of paper.

(b) A custodian of a public record shall, within ten days following receipt of request for inspection or copy of a public record, comply with such request. Such request may be delivered in hand to the office of the custodian or mailed via first class mail. If the custodian refuses or fails to comply with such a request, the person making the request may petition the supervisor of records for a determination whether the record requested is public. Upon the determination by the supervisor of records that the record is public, he shall order the custodian of the public record to comply with the person's request. If the custodian refuses or fails to comply with the person's request. If the custodian refuses or fails to comply with any such order, the supervisor of records may notify the attorney general or the appropriate district attorney thereof who may take whatever measures he deems necessary to insure compliance with the provisions of this section. The administrative remedy provided by this section shall in no way limit the availability of the administrative remedies provided by the commissioner of administration and finance with respect to any officer or employee of any agency, executive office, department or board; nor shall the administrative remedy provided by this section in any way limit the availability of judicial remedies otherwise available to any person requesting a public record. If a custodian of a public record refuses or fails to comply with the request of any person for inspection or copy of a public record or with an administrative order under this section, the supreme judicial or superior court shall have jurisdiction to order compliance.

(c) In any court proceeding pursuant to paragraph (b) there shall be a presumption that the record sought is public, and burden shall be upon the custodian to prove with specificity the exemption which applies.

(d) The clerk of every city or town shall post, in a conspicuous place in the city or town hall in the vicinity of the clerk's office, a brief printed statement that any citizen may, at his discretion, obtain copies of certain public records from local officials for a fee as provided for in this chapter.

The commissioner of public safety and his agents, servants, and attorneys including the keeper of the records of the firearms records bureau of said department, or any licensing authority, as defined by chapter one hundred and forty shall not disclose any records divulging or tending to divulge the names and addresses of persons who own or possess firearms, rifles, shotguns, machine guns and ammunition therefor, as defined in said chapter one hundred and forty and names and addresses of persons licensed to carry and/or possess the same to any person, firm, corporation, entity or agency except criminal justice agencies as defined in chapter six and except to the extent such information relates solely to the person making the request and is necessary to the official interests of the entity making the request.

Fireproof Vaults.

Section 11. Officers in charge of a state department, county commissioners, city councils and selectmen shall, at the expense of the commonwealth, county, city or town, respectively, provide and maintain fireproof rooms, safes or vaults for the safe keeping of the public records of their department, county, city or town, other than the records in the custody of teachers of the public schools, and shall furnish such rooms with fittings of non-combustible materials only.

Arrangement of Records for Reference.

Section 12. All such records shall be kept in the rooms where they are ordinarily used, and so arranged that they may be conveniently examined and referred to. When not in use, they shall be kept in the fireproof rooms, vaults or safes provided for them.

Custodian to Demand Records; Compliance, How Compelled.

Section 13. Whoever is entitled to the custody of public records shall demand the same from any person having possession of them, who shall forthwith deliver the same to him. Upon complaint of any public officer entitled to the custody of a public record, the superior court shall have jurisdiction in equity to compel any person unlawfully having such record in his possession to deliver the same to the complainant.

Surrender of Records by Retiring Officer.

Section 14. Whoever has custody of any public records shall, upon the expiration of his term of office, employment or authority, deliver over to his successor all such records which he is not authorized by law to retain, and shall make oath that he has so delivered them, accordingly as they are the records of the commonwealth or of a county, city or town, before the state secretary, the clerk of the county commissioners or the city or town clerk, who shall, respectively, make a record of such oath.

Penalties.

Section 15. Whoever unlawfully keeps in his possession any public record or removes it from the room where it is usually kept, or alters, defaces, mutilates or destroys any public record or violates any provision of this chapter shall be punished by a fine of not less than ten nor more than five hundred dollars, or by imprisonment for not more than one year, or both. Any public officer who refuses or neglects to perform any duty required of him by this chapter shall for each month of such neglect or refusal be punished by a fine of not more than twenty dollars.

Church Records; Fees; Jurisdiction of Superior Court.

Section 16. If a church, parish, religious society, monthly meeting of the people called Friends or Quakers, or any similar body of persons who have associated themselves together for holding religious meetings, shall cease for the term of two years to hold such meetings, the persons having the care of any records or registries of such body, or of any officers thereof, shall deliver all such records, except records essential to the control of any property or trust funds belonging to such body, to the custodian of a depository provided by the state organization of the particular denomination or to the clerk of the city or town where such body is situated and such clerk may certify copies thereof upon the payment of the fee as provided by clause (25) of section thirty-four of chapter two hundred and sixty-two. If any such body, the records or registries of which, or of any officers of which, have been so delivered, shall resume meetings under its former name or shall be legally incorporated, either alone or with a similar body, the clerk of such city or town or the custodian of said depository shall, upon written demand by a person duly authorized, deliver such records or registries to him if he shall in writing certify that to the best of his knowledge and belief said meetings are to be continued or such incorporation has been legally completed. The superior court shall have jurisdiction in equity to enforce this section.

Records to Be Placed in City or Town Where They Originally Belonged, etc.; Penalty.

Section 17. Except as otherwise provided by law, all public records shall be kept in the custody of the person having the custody of similar records in the county, city or town to which they originally belonged, and if not in his custody shall be demanded by him of the person having possession thereof, and shall forthwith be delivered by such person to him. Whoever refuses or neglects to perform any duty required of him by this section shall be punished by a fine of not more than twenty dollars.

Records Relating to All Public Assistance.

Section 17A. The records of the department of public welfare relative to all public assistance, and the records of the commission for the blind relative to aid to the blind, shall be public records; provided that they shall be open to inspection only by public officials of the commonwealth, which term shall include members of the general court, representatives of the federal government and those responsible for the preparation of annual budgets for such public assistance, the making of recommendations relative to such budgets, or the approval or authorization of payments for such assistance, or for any purposes directly connected with the administration of such public assistance, including the use of said records by the department of public welfare in set-off debt collections under chapter sixty-two D, and including the use of said records by the department of public welfare in concert with related wage reports to ascertain or confirm any fraud, abuse or improper payments to an applicant for or recipient of public assistance; and provided, further, that information relative to the record of an applicant for public assistance or a recipient thereof may be disclosed to him or his duly authorized agent. The commonwealth shall destroy public assistance records ten years after the discontinuance of aid granted under the provisions of chapter sixty-nine, one hundred and seventeen, one hundred and eighteen, one hundred and eighteen A, one hundred and eighteen D and one hundred and nineteen, in such manner as the commissioner or director may prescribe.

Section 17B. Repealed, 1973, 1050, Sec. 4.

Meetings of Governmental Bodies; Judicial Enforcement of Procedures.

Section 17C. Upon proof of failure of a governmental body as defined in section eleven A chapter thirty A, section nine F of chapter thirty-four and section twenty-three A of chapter thirty-nine, or by any member or officer thereof to carry out any of the provisions prescribed by this chapter for

maintaining public records, a justice of the supreme judicial or the superior court sitting within and for the county in which such governmental body acts or, in the case of a governmental body of the commonwealth, sitting within and for any county, shall issue an appropriate order requiring such governmental body or member or officer thereof to carry out the provisions of this chapter. Such order may be sought by complaint of three or more registered voters, by the attorney general, or by the district attorney for the county which the governmental body acts. The order of notice on the complaint shall be returnable no later than ten days after the filing thereof and the complaint shall be heard and determined on the return day or on such day thereafter as the court shall fix, having regard to the speediest possible determination of the cause consistent with the rights of the parties; provided, however, that orders with respect to any of the matters referred to in this section may be issued at any time on or after the filing of the complaint without notice when such order is necessary to fulfill the purposes of this section. In the hearing of any such complaint the burden shall be on the respondent to show by a preponderance of the evidence that the actions complained of in such complaint were in accordance with and authorized by section eleven B of chapter thirty A, by section nine G of chapter thirty-four or by section twenty-three B of chapter thirty-nine. All processes may be issued from the clerk's office in the county in which the action is brought and, except as aforesaid, shall be returnable as the court orders.

Any such order may also, when appropriate, require the records of any such meeting of a governmental body to be made a public record unless it shall have been determined by such justice that the maintenance of secrecy with respect to such records is authorized by section 11B of chapter 30A, by section 9G of chapter 34 or by section 23B of chapter 39. The remedy created hereby is not exclusive, but shall be in addition to every other available remedy.

Massachusetts Natural Heritage Program Data Base and Public Record.

Section 17D. Records of the division of fisheries and wildlife in the department of fisheries, wildlife and recreational vehicles known as the Massachusetts natural heritage program data base shall not be public records; provided, however, that they shall be open for inspection by agents of the commonwealth and the federal government for the purposes of protecting and preserving species and subspecies of nongame wildlife and indigenous plants. Except as otherwise determined by the administrator of the said data base, site-specific rare species information shall be released only upon the receipt of a statement, in writing, by the recipient that he shall keep such information confidential.

Application of Chapter Limited.

Section 18. This chapter shall not apply to the records of the general court, nor shall declarations, affidavits and other papers filed by claimants in the office of the commissioner of veterans' services, or records kept by him for reference by the officials of his office, be public records.

Files

Management

SUPERVISOR OF PUBLIC RECORDS
Municipal Records Management Manual

FILES MANAGEMENT

Files management is one of the most important components of records management. Disposition, the systematic removal of records from the office is viewed as a problem-solver because it results in immediately tangible benefits--savings in space and equipment cost. On the other hand, files management has a much greater effect on productivity. Productivity is enhanced when the arrangement of information, filing standards, and choice of storage equipment are approached thoughtfully. To improve files management, record keepers must rationalize current needs and practices and consciously alter practices where necessary.

M.G.L.A. c. 66, s. 12 mandates good records management by requiring that records be "so arranged that they may be conveniently examined and referred to. When not in use, they shall be kept in the fireproof rooms, vaults or safes provided for them."

A. ARRANGEMENT

Each group of records that is stored together, due to similarities in form, creation, or use, is a series. A series is composed of individual records or filing units that are arranged in some fashion within the series. The ARRANGEMENT of the file units strongly effects the productivity and efficiency of the series. The best arrangement requires that the searcher look in only one place to find the needed record. While indexes and multi-step searches are sometimes unavoidable, the best solutions more often preclude the need for an index. The need to keep an index up to date doubles the time staff need to maintain the files. It is preferable to use subarrangements, internal or secondary arrangements within the broad arrangement categories, to narrow the field of search.

1. Filing Features

A series may be arranged by one of a number of FEATURES. A feature is a standard category of identifying information that appears on all filing units in a series. Examples of such features are:

1. SURNAMES of individuals;
2. TITLES of projects; transactions or reports;
3. LOCATIONS;
4. NUMBERS assigned to locations; projects; organizational units;

5. DATES;
6. SUBJECT TOPICS.

Possible uses of features are: client files arranged alphabetically by surname; correspondence arranged chronologically by date or alphabetically by subject; construction project files arranged alphabetically by location, project title, or numerically by project number.

In all cases, the arrangement of the records that is selected should be based upon the feature that is most often known by the user. Failure to do so will reduce the productivity of your office.

An example may help make this issue more concrete. In Office A, a series of certificates is maintained for ten years. The arrangement is based on the feature of DATE; each year's certificates is filed in a separate drawer. Within each drawer/year, the certificates are arranged alphabetically by recipient. However, certificates are requested by NAME of recipient, the feature best known by the user. Ten drawers must be searched to answer a single request for information.

In Office B, files on licensed individuals are arranged by APPLICATION NUMBER. An alphabetical index is kept, leading users from surname to LICENSE NUMBER. In order to locate records, users maintain a secondary index that leads searchers from license number to application number, thus doubling their work.

In both Office A and Office B, an alphabetical arrangement, based on surname, the feature most often known by the user, would reduce the time and effort needed to locate information. Both offices could make use of color-coding to indicate year of issuance, if such information is also important, to further reduce search time.

Selecting Arrangements

While it is important to assess the needs of the user first, two other factors should be considered as well in selecting a file arrangement:

- 1) the filing and accessing speed of the arrangement;
- 2) the need to remove inactive records from the active records in a series.

Record keepers must weigh the relative merits of each scheme.

Where several features are known by users, it is preferable to use features based on digits, rather than alphabetic characters. Examples are DATES and NUMBERS/SYMBOLS. Numeric features usually appear on the document to be filed; the risk of misfiling due to misspellings is reduced. Shorter numbers,

such as dates, are also easy to scan and remember. SURNAMES and TITLES of organizations or projects are also efficient file features on which to base arrangement. However, like all alphabetically arranged files, misspellings can mean irretrievably lost files. (See the Filing Chart, Appendix, for more information).

Disposition, the removal of inactive records, is hindered by certain arrangements and enhanced by others. The key to disposition is identifying, locating, and removing the inactive record. Series arranged by DATES are the easiest groups from which to remove inactive material. Some arrangements based on NUMBERS/SYMBOLS have similar characteristics. This is particularly true where symbols are encoded with a date, or where series of files arranged by number are active for similar periods of time. Where this is not the case, as with the certificate files in Office A, color-coding aids in identifying the inactive record without disturbing an arrangement based on ease of reference.

2. Subject Filing

Agency staff should carefully review the variables prior to making a decision about changing the current arrangement of an existing series or devising an arrangement for a new series. Compromise will sometimes be necessary where solutions are not well-defined. See the "Guide to Systems for Arranging Files" (Appendix) for more information.

Arrangement by the feature SUBJECT TOPIC requires special consideration due to its complexity. This arrangement should be sparingly used. Subject filing must be based on a thorough understanding of the agency's functions and activities. It is not a simple task. Subject filing is also more labor-intensive than other arrangements. Each item to be filed must be read, assessed, marked with the correct heading, and filed. It is also the most difficult type of arrangement in which to identify and locate inactive records. Active and inactive records are frequently mixed together.

Despite its disadvantages, subject filing is appropriate for certain series. It is frequently used for general correspondence and records series that document repetitive housekeeping and facilitative functions. If properly maintained, the subject file can be a useful way to store and access records.

Subject filing is arrangement by general informational content of the records, in a hierarchical order of subject topics. Its purpose is to bring together all papers on the same topic to make it easier to find information when needed; subject filing in hierarchical order (called classification) limits the area of search by keeping related subjects together.

Subject files usually consist mainly of correspondence but may also include forms, reports and other material that relate to programs and functions, and not to specific cases. It is important to distinguish between a subject file, which documents general planning and operations, and a case file, which documents a specific action, event, person, project, organization, etc. A letter regarding a specific contract or purchase belongs in a case file, while a memo on procurement policy belongs in a subject file. A sample subject filing classification scheme is given in the Appendix entitled "Classification Schemes."

The classification scheme must be tailored to the user agency. When developing a scheme for a subject file, remember that the goal must be to create an organizational scheme that is:

1. **Representative of Information Needs.**

The classification scheme should be based on the type of records required by users and on the way those records are accessed.

2. **Complete and Flexible.**

While there should be a suitable category for all existing and anticipated records, the classification scheme should permit expansion and contraction of the categories as needed.

3. **Logical and Consistent.**

Subordinated topics should be logical portions of the primary topic, so that the reasons for the arrangement will be obvious. Specific topics that are components of a broad topic should not be placed on par with the broad topic.

When beginning a new subject file, or rationalizing a current subject file, begin with the topics used currently. Supplemental headings can be culled from organizational and functional charts. There should be enough headings so that each file will have no more than twenty-five pages added to it annually, but not so many headings that files will grow by less than five pages annually.

3. **File Codes**

File codes are used to document the relationship between subject topics in the file, so material can be more easily filed, accessed and retrieved. In a small subject file of one drawer or less, file codes are unnecessary. Subject topics can be alphabetized within their classification levels. As the subject file grows, however, it will be more difficult to keep related subjects together and still maintain alphabetical order.

Since file codes document the relationship between the subjects, they can enhance order in the files. They can also

speed filing and retrieval. Without file codes, an inordinate amount of time can be spent writing subject headings on papers to be filed and reading labels. Codes also clarify the classification levels of the topics.

There are a variety of coding schemes; subject-numeric codes are frequently used by government agencies. They permit arrangement of primary subjects in alphabetical order, but retain numeric order for subordinate topics. Like all good coding systems, subject-numeric conforms to the following four standards. The subject-numeric system has:

1. short symbols.
2. a simple pattern which is obvious simply by looking at the outline.
3. meaningful symbols, which clearly indicate the subject; "PE" or "PER" is used to indicate PERSONNEL, not a number.
4. flexibility; the system permits the addition of new subjects without changing the symbols assigned to other subjects or breaking the continuity of the pattern.

The subject numeric coding system is demonstrated below.

ADMINISTRATIVE SERVICES (ADS)

ADS

- ADS 1 Reports and Statistics
- 2 Laws and Regulations
- 3 Buildings and Grounds
 - 3-1 acquisitions
 - 3-2 facilities management
 - 3-3 space management
- 4 Office Equipment and Supplies
 - 4-1 maintenance and repair
 - 4-2 purchases
 - 4-3 surplus property
- 5 Printing and Reproduction
 - 5-1 graphic services
 - 5-2 copying
 - 5-3 printing and binding

FINANCIAL MANAGEMENT (FIN)

FIN

- FIN 1 Collections and Receipts
 - 1-1 accounts receivable
 - 1-2 adjustment

1-3	checks, money orders, currency
2	Disbursements
2-1	accounts payable
2-2	adjustments

Items can be filed, and retrieved, by their code. For example, "space management" items can be marked 'ADS 3-3,' and easily and quickly filed.

Alphabetical Index

After the subject classification outline is completed, an ALPHABETICAL INDEX of topics can be prepared. The index will make the subject outline easier to use. Users not familiar with the file system can quickly look up the needed subject in the index, and locate the file. The index is arranged in two columns: the first contains the subject topics listed in alphabetical order; the second lists the locations under which papers on that subject will be filed.

There are two formats that can be used. In a somewhat elaborate index, related terms are indented under a keyword or phrase; if needed, more than one level of indentation can be used. In a simpler alphabetic listing, headings are inverted when necessary to emphasize key words. Under either format, if more than one word is in a caption, such as "Health Insurance," entries are normally necessary under the first letter of each word (under "H" and "I"). Examples of the formats follow:

1.		2.	
Accidents:		Accountable, Property	PRP 1
Employee	PER 1	Damage, Property	VEH 2
Vehicle	VEH 2	Employee, Accidents	PER 1
Property	PRP	Procurement of Property	PRC 4
Accountable	PRP 1	Property	PRP
Damage (vehicle)	PRC 4	Vehicle, Accidents	VEH 2
Procurement of	PRC 4		

4. Files Manual

A FILES MANUAL should be compiled as a central source for information needed to maintain and use the subject file. The manual provides users with easy access to files, and it also provides file clerks with written guidance to assist them in filing and removing material.

The files manual should include:

1. a general statement regarding RETENTION of the FILES. If retention and disposition are not standard throughout the file, statements specific to individual files should be added;

2. a complete SUBJECT OUTLINE, which lists all subject headings in hierarchical order, as they appear in the file drawer, including codes and a DESCRIPTION of the TYPES of material to be filed in the subject heading;

3. THE ALPHABETICAL INDEX

THE RETENTION STATEMENT may refer to all files, or specific primary or subordinate topics, depending on the type of material in the subject file. If two file systems are maintained, one for transitory and one for longer term material, a general retention statement can be made. If the material is mixed, the retention statement must list specific requirements for categories or topics.

For example, categories which contain policy or procedural materials should be noted. These items should be maintained for a longer period of time. Categories which contain such materials as announcements, agenda, transmittals, copies, notices and other transitory items, should be noted, and maintained for a shorter period of time.

The manual MUST be kept updated. Without a current written subject outline and other files information, the subject file will quickly become unreliable. Without proper maintenance, the material in the file will become difficult to access, and will be essentially lost to users.

B. FILES MAINTENANCE

Much time and money is employed collecting information and making it accessible to people who need it. That information will not remain useful, however, unless the file systems in which it is stored are well-maintained.

Maintenance means control over the flow of records in and out of the files. Once a record series has been established, control over what is added and removed from it, and how the records are stored while in the series, is essential. Unnecessary copies, useless information, untidy storage, and inappropriate equipment should be avoided.

1. File less.

Define necessary records. This exercise will place all records created and received by the office in perspective. It should be a regular and periodic practice, as information requirements, and the records themselves, change over time. Using the following simple procedures will aid an office to exert control over the flow of paper:

I. File Fewer Publications

Compile and circulate a list of publications received by the office. Ask the office staff to assess their usefulness

and their period of usefulness. Circulate publications of short-term value and discard after interested staff have reviewed them.

II. File Fewer Information Copies

Documents sent for informational purposes only should not normally be filed. The office of origin can produce more copies as needed. Only those items that will be used subsequently should be filed.

III. File Fewer Directives

Directives belong to an overall issuance system. One person or unit in an office can be assigned the responsibility of maintaining a complete set. The rest of the staff should be informed as to the location of that set and discard their copies.

IV. File Fewer Copies of Routine Communications

a. Attach the letter requesting supplies or publications to the requested material.

b. Answer routine requests at the bottom of the incoming letter.

c. Avoid routine transmittal letters--use routing slips. Return requests for information with a form letter, if such is in use. In all these ways, routine communications are returned to the sender and stay out of your files.

V. Reduce Extra Copy Files

Extra copy files are costly in terms of equipment use and office space. They also undermine the main files. They are open invitations to split what should be kept together in the main file: all the facts in a matter. One good file is worth several kept haphazardly.

VI. Reduce Extra Copy Distribution

Circulation of routine material may serve the same purpose as sending copies to every member of the office staff.

2. File better.

Segregate records having different lifespans. Do not keep records of transitory value in the same folder with records of long term value. You should use the Disposal Schedules elsewhere in this manual as a guide to determining these values. The key to disposition, the timely removal of dated records, is identifying, locating, and removing inactive material. When records having varying retention periods are mixed in storage, it becomes difficult to identify and remove the inactive material.

Establish separate series for long term and transient material. If material of both kinds is found in a series, as is common, use separate folders for long term and transient material within the series. It is even possible to segregate material within a folder if need be; for instance, clipping an application to the left side of a folder and leaving the transient correspondence loose.

3. File Breaks

Breaking files is the process by which inactive material is physically separated from active materials. "Cutting off" files makes it a simple process to identify inactive records in a series where records have the same retention period.

Subject Files

Subject files should be broken annually. To cut off files arranged by subject, such as general correspondence files, record keepers bring forward materials from older files as they are used in the new year. All items brought forward, and all items created or collected in that year are placed in a new folder, which is placed in front of and adjacent to, last year's folder for that subject. At the close of the year, the oldest folder in the file for that subject is removed and a new folder started. For records having a two year retention period, two folders plus a folder for the current year are maintained.

This method provides automatic identification of inactive material and prevents the need for weeding.

Case Files

As case files close, they should be removed from the active series and placed in a separate series of inactive case files. The oldest records in this inactive series should be removed as often as is permitted in the Disposal Schedule.

Reference Files

Most reference files are active until they are superseded. There is no standard rule for breaking this type of series. During daily filing, however, superseded materials should be removed. This is also true for reference periodicals; the oldest periodical should be removed when the newest is added. A constant number of periodicals should remain in the file at all times.

4. Integrity

A neat and well-organized file is efficient; folders and individual items are easy to access, and neatness in filing protects paper and folders from damage. Follow these

guidelines to maintain neat files:

- keep papers down in their proper position so that labels are clearly visible;
- crease folders along the score at the folder bottom, so folders will rest squarely on the floor of the drawer;
- prepare labels neatly;
- allow about four inches of working space in the drawer, in addition to any space needed for files expansion.
- do not permit folders to become tightly packed in the drawer.

Misfiles

In the typical office, three percent of all holdings are misfiled. Each misfile costs approximately eighty dollars in loss of professional and clerical time spent searching for misfiled records. More importantly, misfiles can be the cause of poor decisions on the basis of insufficient information and loss of time spent reconstructing information.

It is wise to check systematically for misfiles before misfiled records become a costly problem. Stagger the files review, so one file segment is checked each week. Review every segment once or twice a year.

Damaged folders and labels can be repaired at the same time.

5. File Equipment

File equipment and supplies must enhance access to records and the protection of records, and should be space-efficient. Purchases should be reviewed to insure that equipment meets this criteria, and that it is truly needed.

a. Access and Protection

File equipment and supplies should enhance access to records and adequately protect records from physical damage. In the case of confidential records, equipment should protect records from unauthorized access. Use of equipment that meets these standards will result in the greatest efficiency.

Record keepers should consider the benefits of SEVEN-TIER OPEN SHELVING. This standard equipment allows the file folder to be placed directly on the shelf in a vertical position, held upright by shelf dividers. Far greater accessibility is possible with shelving than with file cabinets. The open shelf cabinet lends itself to rapid records inventorying and sighting charge outs. Removing and replacing folders is an average of twenty to thirty percent faster with shelf-type than with drawer-type units. Seven-tier open shelving is particularly suited to case files arranged by name or number. In addition, shelving is accessible to several file clerks simultaneously. File cabinets, mobile and traverse shelving permit access only to a limited number of persons at one time.

Another method to enhance filing and retrieval tasks is the use of file guides, dividers with prominent tabs which act as signposts to searchers. There should be one file guide for each six folders of very active material. The guides reduce the area of search, so users can go directly to the area in which the needed record is stored.

Equipment and supplies should protect records. All filing equipment and supplies, such as cabinets, hanging folders and file folders, should be tailored to the file system and the size of the records. For example, letter-size materials should not be housed in legal-size equipment. The records move around, and the edges are damaged. Likewise, legal-size material requires the protection of a full-size folder. The pages may be bent or torn when stored in a letter-size folder.

Conventional equipment, such as open shelving and file cabinets, cannot protect records from fire unless it is used inside a vault. Special fire-resistant equipment may be purchased for small quantities of valuable records. This equipment provides some amount of protection.

Confidential records should be stored in a file room that can be locked. If such a storage area is not available, records should be stored in locking file cabinets or other equipment that can be locked.

b. Space-efficiency

File equipment should maximize available space. Equipment that conserves space should be used whenever possible. Use of such equipment will result in the greatest economy.

Office space now averages \$25.00 per square foot in Massachusetts. A file cabinet requires six square feet of floor space. Inefficient records storage wastes thousands of dollars each year.

Space efficiency is measured in inches of filing capacity per square foot. The greater the filing capacity per square foot, the greater the space economy. The four-drawer legal-size file cabinet is an example of inefficient equipment; it provides 18 inches of filing capacity per square foot. In comparison, seven-tier open shelving and traverse shelving provide 31 and 37 inches of filing capacity per square foot respectively.

Inefficient equipment should not be used. See the "Comparison Chart" (Appendix) for more information.

Purchases of filing equipment should be reviewed by a staff member who has knowledge of the records storage situation in the office. The responsible individual should review requisitions and ask:

Is this equipment really needed?

Are there underutilized file cabinets in the office?

Are supplies, publications, etc. being stored in file

cabinets that could be used for storage of records?
Are inactive records being stored in cabinets that could be used for active records?
Is the requested equipment appropriate for the records involved?
If the requested equipment is unconventional, does it provide significant improvements in efficiency or accuracy?
Could as efficient a system be implemented with other equipment at a lower cost?

c. Vaults

Specifications for vaults for municipal records are contained in the chapter dealing with Security. However, files management considerations are primary in getting the best use of your vault space. Permanent records which must be retained in a vault accrue at a far greater rate than new vault space is constructed. It is important that you take steps to maximize the vault space at your disposal at any given time.

1) Use vaults only for the storage of permanent or current vital records. Workstations, desks, tables, and supplies maintained in a vault waste the most precious space you have.

2) Convert to seven-tier open shelving whenever possible as the storage equipment used in the vault. The vault itself is your major piece of fire-protection equipment; its door should prevent fire damage to its contents for six hours. Standard file cabinets offer minimal protection from fire; particularly in this case, they are not worth the floor space they occupy.

3) Label shelving units or drawers numerically (Unit 1, etc. or FC 1, etc.) and maintain an up-to-date shelf list of the contents of each shelf or drawer by series and date. If you have access to a computer, enter the data and manipulate it to produce an on-going index. This will give you an accurate inventory of the contents of your vault, facilitate access to requested material, and provide a framework for managing future accumulations of permanent records both for you and for your successors.

APPENDIX

Classification Schemes

Guide to Systems for Arranging Files

Comparison Chart of Filing Equipment Costs and Efficiency

APPENDIX A

CLASSIFICATION SCHEMES

Interrelated subjects are grouped in accordance with the agency functions and activities from which they derive, in a tree-like structure.

A classification scheme is a hierarchical structure that shows how records relate to the function they document. The body of records is first divided into broad functional categories to which they relate, called primary subject areas. Examples of primary subject areas based on functions are:

- ADMINISTRATIVE SERVICES
- FINANCIAL MANAGEMENT
- INFORMATION AND PUBLIC RELATIONS
- PERSONNEL
- PROCUREMENT AND CONTRACTING

Primary subjects are then divided into secondary categories. Examples of secondary categories are:

- ADMINISTRATIVE SERVICES
 - Building and Grounds
 - Office Equipment and Supplies
 - Printing and Reproduction
- FINANCIAL MANAGEMENT
 - Collections and Receipts
 - Disbursements
- INFORMATION AND PUBLIC RELATIONS
 - Publications
 - Public Opinion
- PERSONNEL
 - Employee Relations and Services
 - Performance Evaluation
 - Recruitment, Selection and Appointment
- PROCUREMENT AND CONTRACTING
 - Suppliers and Contractors
 - Contract Administration

Secondary categories are divided into tertiary subject areas which describe subsidiary programs, objects acted upon, or specific projects. Examples of tertiary subject areas within the secondary categories follow:

- ADMINISTRATIVE SERVICES
 - Building and Grounds
 - acquisitions
 - facilities and maintenance

- space management
- Office Equipment and Supplies
 - Maintenance and repair purchases
 - surplus property
- Printing and Reproduction
 - graphic services
 - copying services
 - printing and binding

FINANCIAL MANAGEMENT

- Collections and Receipts
 - accounts receivable
 - adjustments
 - checks, money orders, currency
- Disbursements
 - accounts payable
 - adjustments

INFORMATION AND PUBLIC RELATIONS

- Publications
 - annual reports
 - articles
 - newsletters and house organs
 - press releases
- Public Opinion
 - congratulations, appreciation
 - criticism

PERSONNEL

- Employee Relations and Services
 - appeals and grievances
 - conduct of employees
 - disciplinary and adverse actions
- Performance Evaluation
 - documentation and processing
 - rating and appraisals
- Recruitment, Selections and Appointments
 - advertising and publicity
 - appointments
 - examinations and testing
 - qualifications

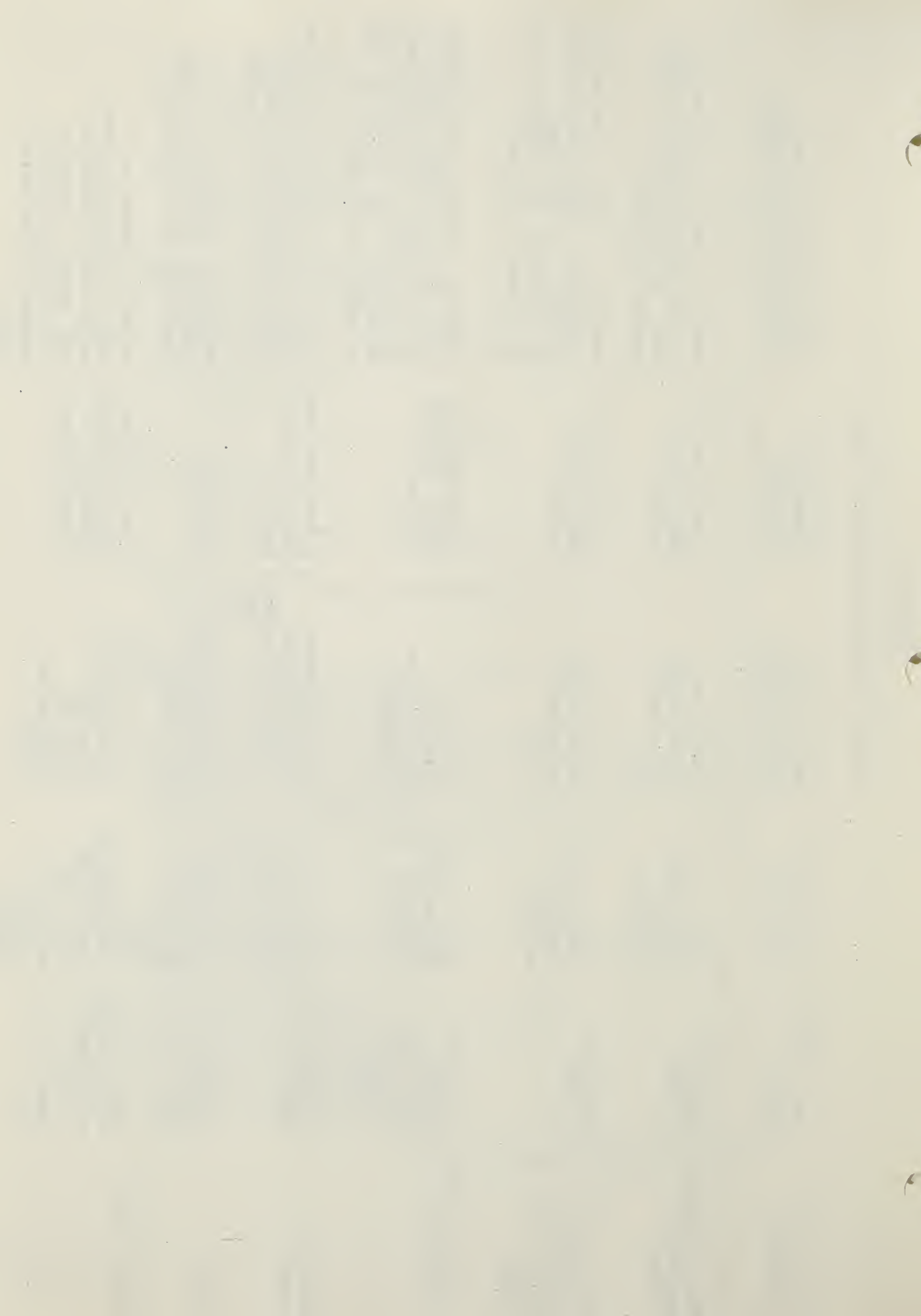
PROCUREMENT AND CONTRACTING

- Suppliers and Contractors
 - bidder lists
 - ineligible bidders
 - catalogs, price lists and schedules
- Contract Administration
 - contract monitoring
 - changes and modifications
 - costs and billing rates

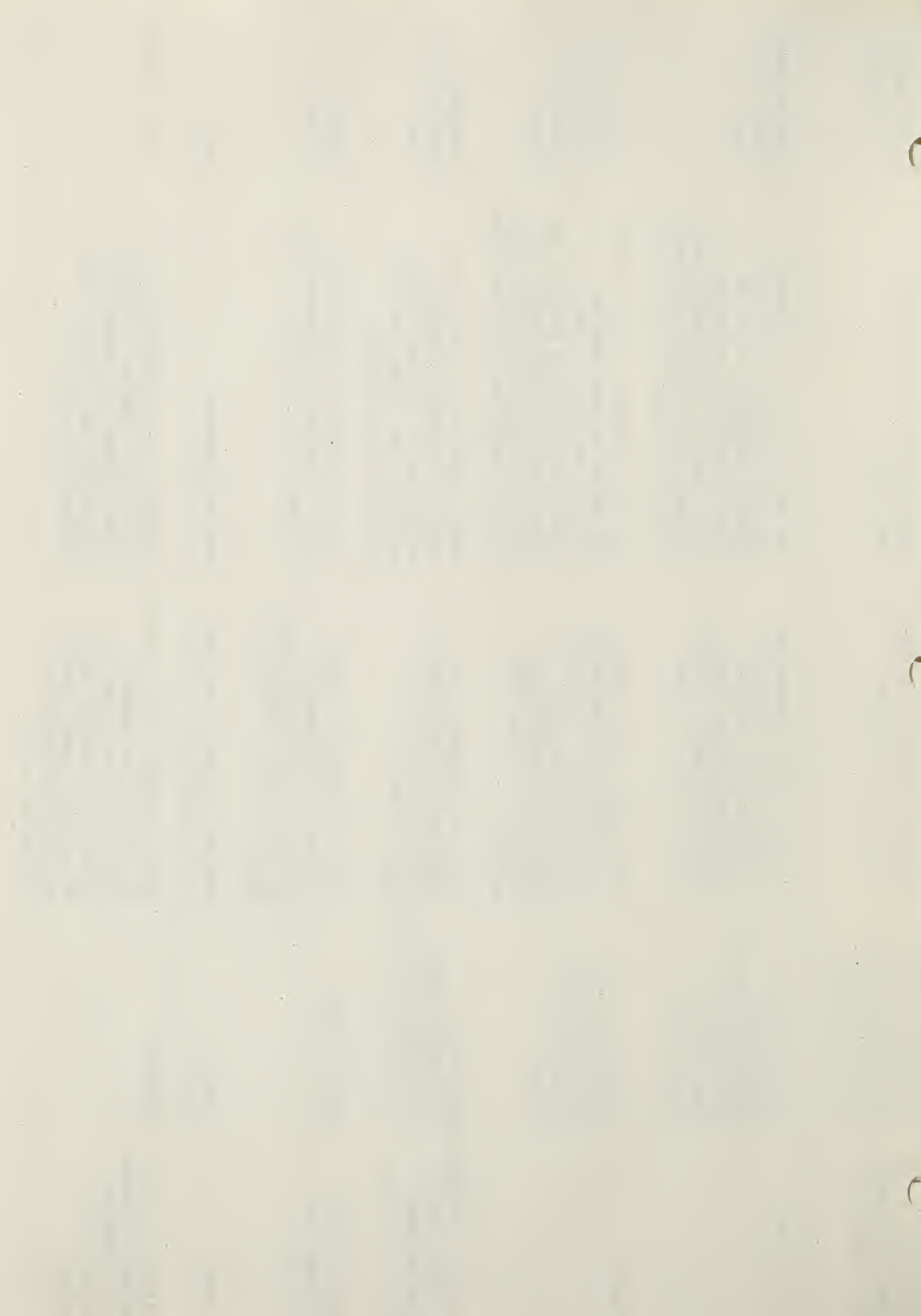
(Source: U.S. Office of Federal
Records Center)

GUIDE TO SYSTEMS FOR ARRANGING FILES

Filing feature of document	Usual filing sequence	Most suitable file groups	Need for index file (by second filing feature)	Need for cross-referencing a document within the file	Likelihood that document description used in request will pinpoint file location
Names of people, organizations, or firms.	Alphabetic by name.	Case. Case working. Technical reference.	Normally not needed, except for precedent cases.	If more than one name or title involved.	Usually. Foreign, organization, and unusual names may be troublesome. The larger the file, the greater the problem.
Names or titles of projects, publications, or products, or things.	Alphabetic by name.	Case. Case working. Technical reference.	Normally not needed, except for precedent cases.	If more than one name or title involved.	Sometimes. Project titles may be troublesome. The longer the name or title, the less chance of agreement. The larger the file, the greater the problem.
Geographic areas or locations.	Alphabetic by name (often sub-arranged by people, things, etc.).	Case. Case working. Technical reference.	Frequently needed as location is not always known.	If more than one area or location involved.	Sometimes. Records may be requested by city but filed by State, or may be requested by people, organizations, or things without the location given. The larger the file, the greater the problem.
Numbers or symbols.	By number or symbol.	Case. Case working. Technical reference.	Name index needed to obtain number or symbol, not known, or incorrectly shown.	If more than one number or symbol involved.	Depends upon widespread use of the numbers or symbols within the office and extent of use on documents received from the outside.
Dates.	By date prepared or used.	Convenience. Transitory Suspense.	Not needed unless large volume filed only by date.	Not needed.	Usually for suspense. For convenience or transitory files exact date often not known.
Subject topics.	Alphabetic by subject topic or by numeric or alpha-numeric file code.	General correspondence (may include cases sub-arranged by names or numbers). Technical reference.	Occasionally an index by names of people, firms and organizations needed.	If more than one subject involved, or document is brought forward.	Unlikely. Request may be vague, and differing terms may be used to describe same document. Relative index may be needed to determine proper subject topic.



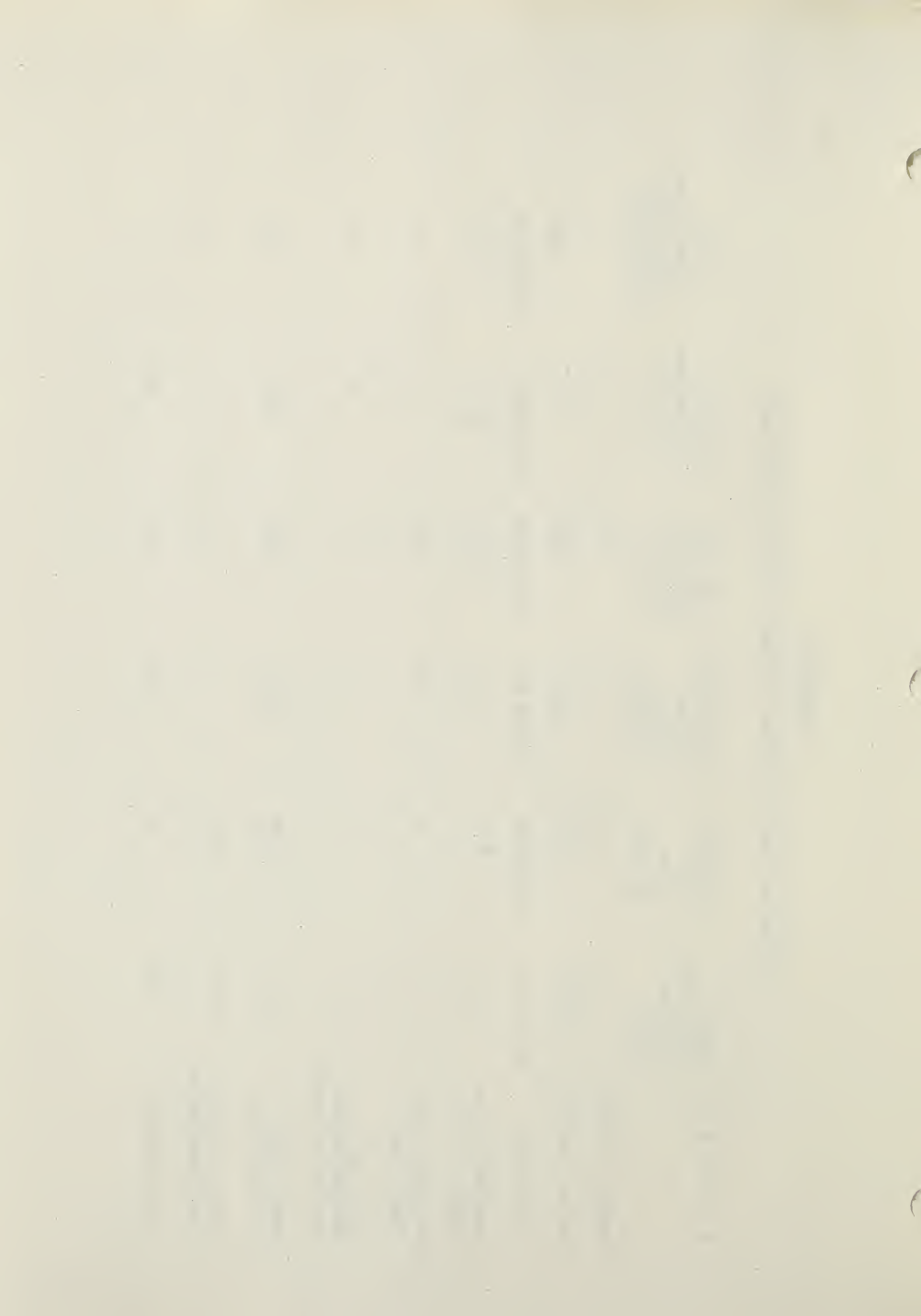
Likelihood of file designation being shown on document when originated	Ease and accuracy in marking a document for filing	Ease and accuracy in sorting and filing	Filing feature of document
Nearly always.	Usually, except for misspellings. Exchanging personal and organization names causes inconsistency.	Fast and easy, if names can be underlined. Fairly slow if names must be written. Spelling errors may occur in unfamiliar names. Adherence to filing rules required.	Slow and difficult. Eye must scan each letter of each word to determine sequence; words and titles vary widely in length. The larger the file, the greater the problem, and the greater the need for rigid adherence to filing rules.
Usually.	Usually. Difficulties may occur with project and other long titles.	Fairly slow. Key words to be underlined may be buried in long titles. Incomplete titles may have to be completed by handwriting. Adherence to filing rules required.	Names or titles of projects, publications, products, or things.
Usually. Location is shown, but not subarrangement file designation.	Depends on consistent choice of locational level for each paper.	Fast, if location can be underlined. Subarrangements often require handwritten designations.	Geographic areas or locations.
Nearly always-but sometimes omitted.	Nearly always.	Fast, if numbers or symbols are short or segmented. Numbers or symbols susceptible to transposition and other errors.	Numbers or symbols.
Always.	Always.	Fast and accurate. Marking rarely needed.	Dates.
Unlikely, since subject, if shown, rarely matches subject outline topics.	Unlikely.	Slow, as content must be read. Use of file code speeds writing, but may require reference to subject outline or relative index. Faulty decisions and errors in writing may occur.	Subject topics.



APPENDIX C

COMPARISON CHART OF FILING EQUIPMENT COSTS AND EFFICIENCY

F A C T O R S	Manual Mobile Shelf Sections 7 Tier	Traverse Shelf 7 Tier 35" Shelf	Open Shelf Cabinets 7 Tier 35" Shelf	5 DR file Cabinets 26" Drawer	4 DR File File Cabinet 26" Drawer	4 DR (Legal-Size) File Cabinet 26" Drawer
Number of Units	7	11	11	20	21	21
Filing Capacity	2520"	2645"	2640"	2600"	2646"	2646"
Total Cost	\$5,040.00	\$2,298.00	\$1,892.00	\$8,140.00	\$6,300.00	\$8,064.00
Cost Per Filing Inch	\$2.00	\$.82	\$.72	\$3.13	\$2.38	\$3.05
Total Sq. Feet Floor Space	48	73	87	131	137	165
Linear Inch Records Per Sq. Foot Floor Space	52	37	31	27	21	18
Total Weight w/Records (lbs.)	7161	7534	7502	8860	9503	9713
Pounds per Sq. Foot Floor Space	250	103	87	92	75	66
Overall Height	88"	77"	72"	58"	52"	52"



Records

Disposition

Disposition

SUPERVISOR OF PUBLIC RECORDS
Municipal Records Management Manual

RECORDS DISPOSITION

Disposition is the regular and rational process by which records are removed from the office when they are no longer active. These inactive records may be removed and destroyed if they have no further usefulness or they may be removed and placed in a vault or other secure storage area for temporary or permanent retention if they have permanent value.

A. INVENTORY

Disposition must begin with a records inventory; how can a records custodian make decisions about disposing of records if the identity and value of those records is not known?

With the completion of an inventory, the official will have definite knowledge of the types of records held, their inclusive dates, volume, the type of information they contain and the location of the records. Once the inventory has been compiled, an annual updating will keep the inventory current. The inventory can be used in conjunction with the statewide retention schedule to ensure that:

- (a) departmental records are safely stored and readily available;
- (b) long-term records are preserved;
- (c) obsolete records are disposed of properly.

The inventory can also assist custodians in establishing the control necessary to effective reference and security of records. Collection management information is easily gathered during and inventory process. The collection management information sheet, on the reverse side of the inventory sheet, is designed to collect data that can be used to schedule unscheduled records, appraise current records, to reappraise archival records, and to note conservation and storage needs.

The first step for a municipal office wishing to conduct an inventory is to appoint a records officer. This person may be the department head or, in the case of larger offices embracing several divisions, a records coordinator. In the case of multi-division offices, representatives from each division should be included in the planning stage of the inventory so that the program can be explained and understood.

In conducting the inventory, current records should be examined before non-current records since officials will be more familiar with them. It is important that all records be

inventoried; none should be overlooked because of their seeming unimportance or disorganization.

The inventory should proceed in a systematic manner, with information immediately and clearly recorded on a worksheet. Separate worksheets should be completed for every record series held by an office. A records series may be defined as a set of records organized or filed in accordance with a single filing system. For example, general correspondence organized in a series of alphabetically-arranged folders constitutes a records series. A collection of vouchers, or selectmen's minutes or highway department vehicle maintenance reports are other examples of records series. Separate worksheets should also be completed for parts of a single records series found in different locations.

After completing an inventory of the records, worksheets can be arranged in various ways. They may be arranged alphabetically by title of records series, by location, or in a more complex fashion based on a classification of the records by type. Photocopying the forms will allow for multiple approaches to the organization of the worksheets.

An inventory worksheet and instructions for its completion are included in the appendix to this chapter. It may be useful since it clearly specifies the types of information which should be sought. Also included is information on identifying archaic and historical records.

B. APPRAISAL

With the completion of a records inventory, municipal officials are then able to move to the next step in their program to provide appropriate care for their records, that of appraisal. The appraisal of records is one of the most difficult, and significant steps in a records program. It is the point at which definitive judgments are made about the enduring values of records. These judgments will lead to the destruction of some records, the temporary retention of others and the permanent retention of yet other materials.

First, the official should consult the statewide retention schedules for the particular town or city office. Most municipal records series are listed on a retention schedule. If the records series in question is listed, then the official need only prepare to take appropriate actions based upon the prescribed retention period. Permanent records must be retained; records having unexpired retention periods must be maintained until that point in time. Those records having retention periods which have expired can be disposed of in accordance with the procedures described under "Disposition" in this chapter.

If, however, the records series in question is not listed on the schedule, then the official should be prepared to appraise the material. This process is critical and should be performed in close consultation with those individuals who are most directly responsible for the creation and use of the records in the office. They will know the most about the potential value of the records. The assistance of the Supervisor of Public Records can also be sought as needed in the appraisal of records.

The appraisal process is essentially one in which the records are evaluated for the presence of several values. Records possessing one or more of the following values may need to be preserved permanently, or for a period of time (e.g., three years, five years, etc.), or until an event (file, audit, etc.), or until a combination of an event and a time period (audit plus three years, etc.).

1. Administrative Value

A record possesses administrative value if it helps the office perform its current work or would help the office in the performance of future work. The official performing the appraisal should ask, "At what point in time will this record, or records series, cease to be of potential administrative value? Is this administrative value found in any other records which will be retained?"

2. Legal value

A record possesses legal value if it documents a legal right or obligation of a citizen or of the office or of the municipality. A record will lose that value at the point in time when that legal right ceases, or ceases to be enforceable under current law. The official should ask, "At what point in time will this record, or records series, cease to document any enforceable legal rights? Are these rights documented by any other records which will be retained?"

3. Fiscal Value

A record possesses fiscal value if it uniquely documents or verifies the spending or receipt of public monies. Many records lose fiscal value after they have been audited. The official should ask, "At what point in time will this record, or records series, no longer be needed to document the transfer or payment or encumbrance or other action pertaining to the spending or receipt of public monies? Is that information documented in another record which may be more appropriate to keep?"

When municipal officials have completed their appraisal of a records series based on the forgoing criteria, there still

remains one more value to be sought in the records. Consultation with the Supervisor of Public Records may be particularly appropriate in testing for this value which can be the most subjective value to verify through the appraisal process.

4. Informational Value

The application of this value is fundamentally a search in the records series for information that has long-term importance to the creating office, or to researchers in a variety of disciplines. Does the series provide valuable information on persons, events or subjects? Does the series provide valuable information on the key operations of a significant municipal office? Generally, records which document the operation, procedures, policies or organization of municipal government, or contain significant factual information, will possess this value. This value, however, also must be tested against such other considerations as the uniqueness of the records, the importance of the information, the accessibility of the information (in light of the volume or understandability or format of the material) and the likelihood that the material will actually be used by future historians or other researchers.

Also, it is essential to note that state law (M.G.L.A. c. 66, s. 8) establishes that no public record created prior to 1870 may be destroyed. As such records are considered to have historical value requiring their permanent retention.

Records series may have varying significance under any combination or all of these values. A retention period should be established which will satisfy the longest retention period required under any of the values. Permanently valuable records series should be retained under appropriate conditions to ensure their long-term preservation. They should be well identified, available to researchers and given proper preservation treatment (including possible microfilming). Records series with limited retention periods which have not yet been satisfied should receive appropriate care in the interim. At the end of that period, they should be disposed of. Those records series having retention periods which have expired should be immediately disposed of consistent with the procedures set forth under "Disposition," below.

5. Disposition

Once records have been inventoried and appraised, and control has been established over records holdings, it is then possible to develop systematic procedures for the disposal of records which have become obsolete.

6. Advantages of Disposition

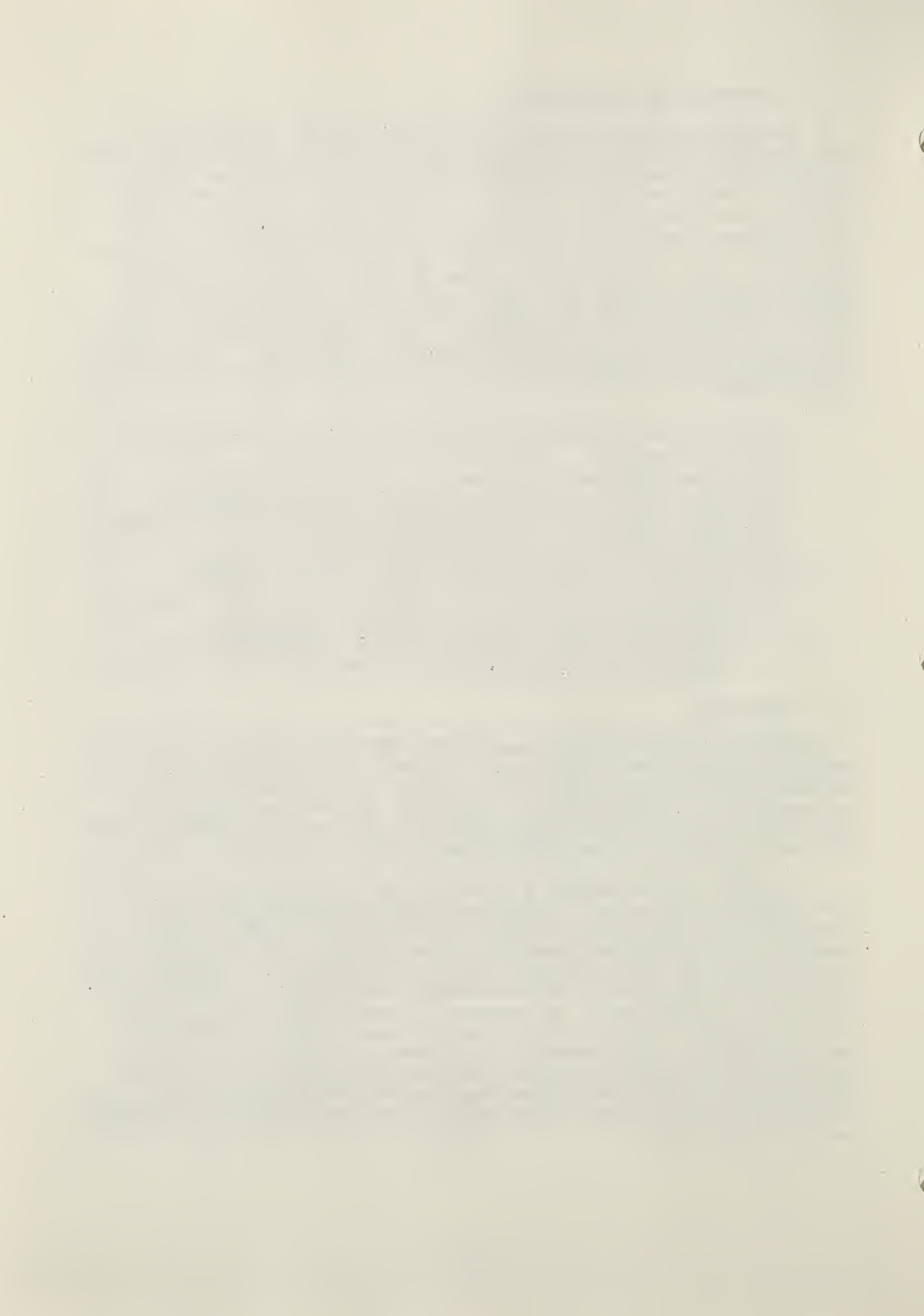
The disposal of records in accordance with statewide records retention schedules will result in the removal of large quantities of obsolete records from among the many records series in each municipal office. Based on current costs for storing and maintaining records, or more the freeing of space and attendant staff time to service records disposal of obsolete records will effect significantly large savings. Not only that, but the initial savings figures can be considered annually since cities and towns will never again have to maintain those records on which disposal procedures have been enacted. So long as schedules are regularly implemented the re-accumulation of such records will be prevented. In sum, a well thought-out program of records retention and disposition will:

- (a) ensure that records are kept as long as they are required;
- (b) result in the destruction of obsolete material;
- (c) facilitate the rapid retrieval of information;
- (d) clear space for more productive use and prevent the accumulation of unnecessary records;
- (e) eliminate potential fire hazards caused by the clutter and over-crowding of obsolete records;
- (f) effect cost-savings by freeing floor space, reducing staff time required to service records, and eliminating the need to purchase additional filing equipment to house useless records.

7. Procedures

In Massachusetts government offices are required to obtain authorization before destroying records. M.G.L.A. c. 66, s. 8 of the General Laws provides for the preservation of the records of the Commonwealth, counties, cities and towns and expressly prohibits the destruction of any records "without the written approval of the Supervisor of Public Records."

In order to establish a norm for the disposition of local government records, the Supervisor has authorized retention schedules for several municipal departments. Each schedule contains a list of records series or types of records created and maintained by an office; statutory citations to help clarify the identity of records; and the minimum time period for which records must be retained. Instruction sheets and sample disposal request letter are attached to the front of each schedule. The essential procedure is to submit to the Supervisor a letter (in duplicate) citing the records to be disposed of, inclusive dates, and overall estimated volume. One copy of this letter will then be returned with the approval of the Supervisor.



APPENDIX

Municipal Records Inventory Sheet

Collection Management Information Sheet

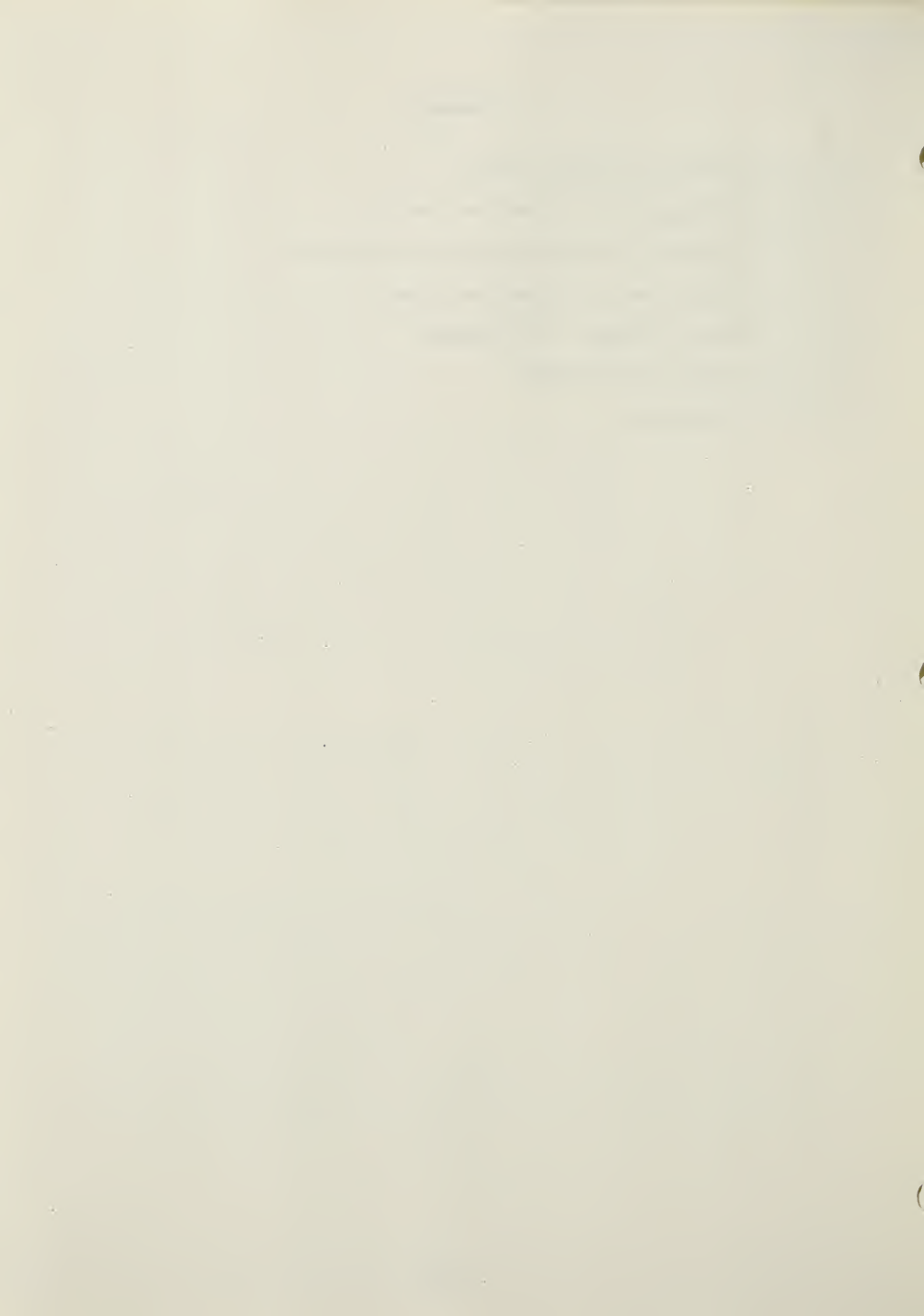
Municipal Records Inventory Sheet Instructions

Collection Management Information Sheet

Select Historic Records - A Glossary

Cubic Foot Equivalency Chart

Retention Schedules



MUNICIPAL RECORDS INVENTORY SHEET

- 1) Department: _____ Completed by: _____
Division: _____ Date: _____
Section: _____
- 2) Title of Record Series: _____
- 3) Binder's Title: _____
- 4) Legal citation: MGL _____ Bylaw/Ordinance _____
- 5) Restrictions: _____
- 6) Arrangement: _____ alpha _____ numer _____ chron _____ other
by: _____
- 7) Span Dates: _____ 8) Volume: _____ Physical Description: _____
_____ - _____ _____ cu ft _____
- 9) Description of Record Series: _____

- 10) Index: _____ 11) microfilm available (see reverse) Y/N
- 12) Related Series: _____
- 13) Information available elsewhere: _____

- 14) Location: _____

COLLECTION MANAGEMENT INFORMATION SHEET

1) Records Retention schedule #: RE _____

Retention period: _____

3) Are record still created?: Y/N If not, last date: _____

4) Microfilm:

Location:

master _____

copies _____

Filmed by whom: _____

when: _____

Archival quality Y/N

5) Physical condition of record:

Description: _____

Conservation work needed: _____

Microfilming needed: Y/N

Special handling required: Y/N

Need weeding: Y/N

Rehousing needed: Y/N

Reference use note: _____

MUNICIPAL RECORDS INVENTORY SHEET INSTRUCTIONS

1. Department, Division, Section

This information places the records in their organizational setting. Some departments will have no divisional or sectional breakdowns. Include initials of person filling out the form and the date it was filled out.

2. Series title

The series title should be as specific and descriptive as possible. The accompanying select list of historical records and glossary and appropriate departmental retention schedules will include most record series titles. Series titles on schedules should be used to complete inventory sheets whenever possible.

3. Binders title

Use title on binding of volume or written on outside of container if it differs from the series title. This will be helpful in locating records.

4. Legal citation

Use citation for the chapter and section of Massachusetts General Laws or town by-law or ordinance which mandates the creation and/or filing of this record.

5. Restrictions

Make a note if the record contains personal identifiers which should be restricted. Marking the inventory sheets for these records with a red sticker, or segregating them in a separate section of the guide to your collections will alert the clerk and the researchers to these sensitive records.

6. Arrangement

Explain how the various records in the series are arranged, whether alphabetically by subject or department, chronologically by date filed, numerically by docket number, or by some other system.

7. Dates

Give beginning and ending dates of the records. If records are missing for a period of time, note this at the end of the description note.

8. Volume

Measure how much space the records occupy. Use cubic feet as the measure of volume. (See cubic foot equivalency chart in appendix to this section. Include a more specific physical description to help identify the records (i.e. 30" x 18", 2 record cartons and one document box; 1 file folder).

9. **Description of record series**

The description should be divided into three sections, the first statement should contain 1) the purpose or function of the series; such as, "Fenceviewers Decisions, agreements and assignments made by the fenceviewer in instances of private boundary disputes;" 2) a description of the types of information contained in the record, such as, "Application for Naturalization, gives applicant's name, address, occupation, and name of court in which petition for naturalization is pending," and 3) other pertinent information about the record, such as, "records from 1830-1850 were lost in a fire of the town hall," or "these records are annotated in the margins with information pertinent to the history of the old schoolhouse."

10. **Index**

Are the records indexed? Enter the information about type of index and its location, such as, "there is a name index in volume or card catalog in office."

11. **Microfilm**

Circle yes or no. (see microfilm note #3 on reverse side of sheet). Encouraging the use of microfilm will protect the original document.

12. **Related series**

Use for related series which give additional information about the same function or a record designed to be used in conjunction with the series.

13. **Information**

Use for copies of record series being described or for other series containing the same information.

14. **Location**

Give the physical locations for all increments of the series and related dates if the series is divided. Use for records which duplicate the information found in the series (this is important for establishing the proper retention period for the series).

COLLECTION MANAGEMENT INFORMATION SHEET INSTRUCTIONS

(side 2 of Municipal Records Inventory Sheet)

1. **Retention information**

Have the records already been scheduled for retention/disposition purposes? If so, give the schedule

number and retention period. If not, the individual completing the worksheet should suggest such a retention period (permanent, destroy after five years, destroy after audit, etc.) and provide a justification for the suggested period. This is not the final retention period which will be established, but only a suggestion based on immediate impressions--a suggestion subject to later revisions.

2. Are records still created?

If no, give date last created.

3. Microfilm

Give the location of the master and copies, the date filmed and by whom and whether or not it was filmed on archival quality (silver halide) and processed accordingly.

4. Physical condition

Are the records in good or poor condition? Explain any problem in their condition, i.e. mold, acid degeneration, discoloration, water damage, brittleness, insect or rodent infestation or damage, etc. Also include how the records are stored. Identify the type of storage equipment which is used to hold the records. Should the records be microfilmed? is there special handling required? is rehousing or weeding of the records needed?

5. Reference use note

How have these records been used by researchers, and how often. Is there any information that you have gained about these records from researchers that will assist in the appraisal of the series, or assist departments and agencies in using them.

SELECT HISTORIC RECORDS

A GLOSSARY

BOARD OF SELECTMEN

FENCEVIEWER'S DECISIONS

Agreements and assignments made by the Fenceviewer in instances of private boundary disputes.

HIGHWAY RECORDS (including Petitions for Roads, Minutes of committees to examine roads, etc.) Papers generated by the Selectmen in their capacity as supervisors of highway work.

MINUTES

Usually bound volumes which record the actions of all Selectmen's meetings. It may also include approval of building permits, applications for licenses, appointments and public works and welfare decisions.

PERAMBULATION OF TOWN LINES

Records attesting to the correctness of the boundary markers following "Perambulation Day" by the Selectmen from adjacent towns who walk the towns' boundaries.

PETITIONS (Requests)

Petitions presented to the Selectmen by local residents.

ROAD LOCATIONS

Minutes of roads laid out by order of the Selectmen or by the County Commissioners.

SURVEYORS' MAPS

Original drawings of early town roads and boundaries; landmarks, such as brooks, trees, houses, occasionally drawn in.

CITY/TOWN CLERK

APPLICATION FOR NATURALIZATION

Gives applicant's name, address, occupation, and name of court in which petition for naturalization is pending.

ASSIGNMENT OF MORTGAGES

Agreement to sign over wages for a specified period of time to satisfy a creditor.

BY-LAWS AND REGULATIONS

Original copies.

CEMETARY DEEDS

Deeds for property turned over to the town for the cemetary.

Cemetary records.

Register of grave owners and occupants.

CHATTEL MORTGAGE BOOKS

Records sales transactions on non-real estate personal property (e.g., horses, cattle, motor vehicles, etc.)

COMMITTEE REPORTS

Reports from special committees delegated to perform specific tasks.

COUNCIL RECORDS

Minutes of City Council meetings, ordinances, etc.

ELECTION RETURNS

A record of votes cast for candidates.

FENCEVIEWER'S DECISIONS

Agreements and assignments made by the Fenceviewer in instances of private boundary disputes.

MARRIED WOMEN'S BUSINESS CERTIFICATE

Affidavit required of a married woman maintaining a business, stating that she owns and operates the business in her own name, independent of her husband, with the inference that he is not liable for any debt she incurs.

MILITIA LIST

This record usually lists Militia members.

PROPRIETOR'S RECORDS

Records relating to allocation of land among original settlers.

REGISTER OF VOTERS

The names of residents eligible to vote.

RESIGNATIONS

Notice to the town that a town officer intends to resign.

STREET LIST

A house by house record of residents, originally for the purpose of establishing eligibility at the polls.

TOWN AUDIT

(Required by c. 41, s. 53 of the General laws)

A yearly statement of the town's financial condition, prepared by the Town Accountant.

TOWN CHARTER

The original act establishing the town.

TOWN MEETING MINUTES

Official minutes copied later in Town Records.

TOWN MEETING WARRANT

Agendas for regular and special town meetings, listing all articles to be considered.

VITAL STATISTICS:

Births (Birth Certificate, Birth Return)

Information includes parents' name, birthplaces and occupations, child's name, place of birth, sex and color, birth, weight and name of informant.

Register of Births

Information copied from the Birth Certificate for each local birth.

Index to Births (also deaths and marriages with similar information)

An index to the Register of Births, arranged alphabetically, then chronologically, providing infant's name, year of birth, and page reference to the corresponding volume of the Register of Births.

Marriage intentions

Affidavits filed with the Town Clerk giving notice of the intention to marry, which the Town Clerk then publishes as required by law.

Marriages (Marriage License, Marriage Return)

Certificates of marriages performed with information regarding birthplace, sex, color, age, male's occupation, number of marriages for each and parents' names. Parental consent forms, copies of divorce decrees, and premarital medical certificates sometimes included.

Register of Marriages

Information copied from the certificate of marriage, recorded chronologically with reference to certificate number.

Deaths (Certificate of Death, Death Return)

Standard or Medical Examiner's Certificate filed with Town Clerk, including name of deceased, age, sex, race, marital status, occupation, birthplace, parents' names and birthplaces, cause of death, autopsy findings, if any, place of burial, and name of undertaker or burial agent.

Register of Deaths

This copies most of the information from the certificate of death for the purpose of reference and safe-keeping. Recorded by date of death.

BOARD OF ASSESSORS

DEED BOOKS

Records real estate transactions.

FIELD ASSESSMENT CARDS

Cards documenting all changes in valuation with drawings and dimensions of building on each card.

FIELD BOOKS

Surveyor's or engineer's notes or measurements of observations.

MINUTES

Minutes of Assessors' Meetings.

TAX LISTS (Real Estate)

The inventory of each property owner's real and personal property on which each year's various tax bills are based.

TAX MAPS

Maps showing the location and dimensions of each plot of land in town.

COLLECTOR-TREASURER

COMMITMENT BOOKS (All Taxes)

Collector's record of payment, for real estate, personal property, motor vehicle excise and poll tax and water rates commitment.

DEBT RECORD

A register of each bond as it becomes part of the town's permanent debt, with accumulated interest posted semi-annually until the loan is paid off.

INSTRUMENT OF TAKING

The legal record of transfer of property from delinquent taxpayer to the town.

TAX TITLE ACCOUNT

Records of local tax title sales resulting from overdue tax foreclosures initiated by the Town Treasurer.

PRE-1900 FINANCIAL RECORDS (ACCOUNTANT/AUDITOR)

DAY BOOKS

Book of accounts listing every financial transaction in any given day.

JOURNAL

The Journal records receipts and disbursements on a daily basis without regard to account.

LEDGER

The comprehensive yearly summary of monthly debit and credit totals by account.

OVERSEERS OF THE POOR

CORRESPONDENCE

Request for support.

INDENTURE CONTRACT

A contract binding one person (as an apprentice) to work for another for a given period of time.

MINUTES

Minutes of meetings.

OVERSEERS REPORT

Yearly report to Town Meeting in the form of a statement of financial condition.

PAUPER REGISTER

A log of paupers fully or partially supported by the town.

SCHOOL DEPARTMENTS

MINUTES OF SCHOOL COMMITTEES

Minutes of meetings recording the deliberations and decisions of the school committee.

PLANS AND DRAWINGS OF SCHOOL BUILDINGS

Original plans and drawings of school buildings.

RECORDS OF THE PRUDENTIAL COMMITTEES (Financial and otherwise)

The Prudential Committees were the forerunners of school committees.

SCHOOL RETURNS

These Returns include financial and statistical reports.

SPECIAL REPORTS TO/FROM SCHOOL COMMITTEE

Reports from special committees delegated to perform specific tasks.

CUBIC FOOT EQUIVALENCY CHART

FILE FOLDER DRAWERS

Letter	1.5
Letter Transfile	2.0
Legal	2.0
Legal Transfile	2.5
Ledger	3.0
Jumbo	4.0

MAP OR PLAN DRAWERS

2"x26"x38"(flat)	1.1
2"x38"x50"(flat)	2.2
4"x26"x38"(flat)	2.3
4"x38"x50"(flat)	4.4

SHELF UNITS

Letter 36" long	2.4
Legal 36" long	3.0

MAP OR PLAN TUBES

2"x2"x38"(roll)	0.1
2"x2"x50"(roll)	0.1
4"x4"x38"(roll)	0.3
4"x4"x50"(roll)	0.5

CARD FILE DRAWERS

3"x5"x26" long	0.4
3"x5"x14" long	0.2
3 1/2"x7 1/2"x26"long (tab)	0.4
3 1/2"x7 1/2"x14"long (tab)	0.2
4"x6"x26" long	0.5
4"x6"x14" long	0.2
5"x8"x26" long	0.7
5"x8"x14" long	0.4
6"x9"x26" long	1.0
6"x9"x14" long	0.6
8"x8"x26" long	1.2
8"x8"x14" long	0.6

RECORD CENTER CONTAINERS

10"x12"x15"(Paige)	1.0
3 1/2"x8"x14"(tab)	0.2
3 1/2"x8"x24"(check)	0.4
6"x6"x36"(map)	0.6
6"x6"x48"(map)	0.8
4"x4"x48"(map)	0.3

ALL OTHER USE FORMULA

$$\frac{L \times W \times H(\text{inches})}{1728} = \text{cu.ft./unit}$$

Retention Schedules

Below is a list of the municipal records retention schedules approved by the Supervisor of Public Records. (The schedules themselves follow in this Manual.) The form numbers may be translated as follows: the letters "RS" signify Retention Schedule; the middle number represents the order in which the schedule was developed; and the last two digits signify the year of latest revision. Extra copies of schedules may be obtained by writing to the Supervisor or by telephoning the Records Management Section at the Archives Division at (617) 727-4062.

RS-1-77	Assessors
RS-2-85	Town Clerk
RS-3-86	City Clerk
RS-4-86	Collector
RS-5-82	Treasurer
RS-6-82	Accountant/Auditor
RS-7-82	Board of Health
RS-8-89	Purchasing Department
RS-9-80	Board of Selectmen
RS-10-80	Fire Department
RS-11-80	Fire District
RS-12-81	Veterans' Services
RS-13-79	Sealers of Weights and Measures
RS-14-81	Police Department
RS-15-81	Licensing Board
RS-16-81	Public Works
RS-17-89	Retirement Board
RS-18-81	Conservation Commission
RS-19-82	Building Department
RS-20-82	School Department
RS-21-85	Board of Appeals
RS-22-85	Planning Board

PURCHASING RECORDS DISPOSAL SCHEDULEInformation and Procedures

1. The following is a list of standard records mandated for use by officers responsible for municipal purchasing in carrying out their statutory responsibilities.

2. This schedule is arranged alphabetically by title of record series.

3. Each entry includes a schedule number, record series title, statutory references to the Massachusetts General Laws Annotated, and the minimum period for which the record must be retained.

4. To destroy records included on this disposal schedule, the officer responsible for purchasing should submit to the Supervisor of Public Records two copies of a letter substantially in the form suggested by the sample shown here, indicating the schedule number, estimated volume, and the inclusive dates for each type of record to be destroyed. One copy of this letter will be returned to the requester with the approval of the Supervisor. Following receipt of this approval, all records included in the written request may be legally destroyed subject to any conditions specified thereon.

5. To destroy a record which is not presently included on this schedule, a letter in duplicate should be submitted to the Supervisor indicating the title, inclusive dates of each item, and alternate sources (if any) of the record and/or information contained thereon.

6. Before submitting destruction requests to the Supervisor, be sure that the prescribed retention period has fully expired for each record to be destroyed. Where this refers to "completion of satisfactory audit," include these or other variable dates so that the eligibility for destruction of the records in question may be checked.

7. Where items dated within the current fiscal year have already been audited, they should nonetheless be retained through June 30 (or December 31) or later, as necessary.

8. For further information regarding this disposal schedule, contact: Supervisor of Public Records, Massachusetts Archives at Columbia Point, 220 Morrissey Boulevard, Boston, MA 02125. Telephone: (617) 727-4062.

SAMPLE LETTER TO REQUEST PERMISSION TO DESTROY RECORDS

LETTERHEAD
(Purchasing Officer)

DATE:

Secretary of State
Supervisor of Public Records
Archives Division-Records Management Section
Massachusetts Archives at Columbia Point
220 Morrissey Boulevard
Boston, MA 02125

Dear Supervisor:

This is to request authorization for the destruction of records included on the Purchasing Records Disposal Schedule as follows:

SCHEDULE NUMBER

8.1 INCLUSIVE DATES

8.2 January 1, 1981 to June 1, 1982

8.5 January 1, 1979 to June 30, 1981*

January 1, 1974 to December 31, 1979**

Estimated volume: 13 cubic feet

Very truly yours,

(signature of legal custodian)

* Contracts not under seal.

** Last audit of Board accounts satisfactorily completed as of November 30, 1988.

APPROVED:

DATE:

Supervisor of Public Records

SPECIAL NOTES

1. All record items which pertain to state and federal grant programs must be retained for a period of time sufficient to comply with any and all applicable statutes, regulations and/or guidelines.

2. Certain records of purchasing offices are conventionally filed with other offices, (e.g., Treasurer; Selectmen, Auditor/Accountant). To avoid the unnecessary holding of quantities of duplicated records, the Supervisor of Public Records will consider requests to dispose of purchasing records which are duplicated in another office, providing the duplicate record is held for a period of time no less than designated in this disposal schedule.

Further, in such cases, it will be necessary to demonstrate as part of the request for early disposition, that the purchasing office and the public will have access to the duplicate records so held. If such early disposition is requested, it is necessary that the responsible officer (e.g., Purchasing Agent) explain the relevant circumstances in the request for disposition to the Supervisor of Public Records.

In all cases, it is imperative that the records custodian contact the Supervisor of Public Records for prior permission to dispose of any record.

NUMBER	TITLE	STATUTORY REFERENCE	DISPOSAL PERIOD
8.1	Bids (Unsuccessful or No Contract Awarded)	c.40 s.4B c.41 s.103	4 years provided no litigation is pending.
8.2	Contract Files	c.40 s.4B, 4B1/2, 4D c.41 s.103	7 years following fulfillment of terms of contract except contracts under seal then 21 years following fulfillment of terms; provided no litigation is pending and all relevant audit have been performed.
8.3	Invitation to Bid (No Contract Awarded)	c.40 s.4B, 4G c.41 s.103	4 years provided no litigation is pending.
8.4	Purchase Logs	c.41 s.103	1 year after audit provided no litigation is pending.
8.5	Purchase Orders	c.41 s.103	7 years after payment provided no litigation is pending and all relevant audits have been performed.
8.6	Purchase Requisitions	c.41 s.103	1 year after audit provided no litigation is pending.
8.7	Receiving Slips	c.41 s.103	1 year after audit provided no litigation is pending.
8.8	Request for Quotation	c.41 s.103	4 years provided no litigation is pending.
8.9	Return of Bid Deposit Letter	c.40 s.4B, 4G c.41 s.103	4 years provided no litigation is pending.

PURCHASING

CDS-4-89

NUMBER	TITLE	STATUTORY REFERENCE	DISPOSAL PERIOD
8.10	Vendor List	c.40 s.4B c. 41 s.103	When superseded.

RETIREMENT BOARD RECORDS DISPOSAL SCHEDULEInformation and Procedures

1. The following is a list of standard records which can be found in the custody of Retirement Boards and includes those forms currently mandated for their use in carrying out specific statutory responsibilities. Other records widely used supplementary to the performance of these duties are also listed on this schedule.

2. This schedule is arranged alphabetically, first by category (e.g., Administrative and Accounting; Retirement Benefits Case Files) and again, by record series title.

3. Each entry includes a schedule number; record series title; form numbers if any; statutory reference to the Massachusetts General Laws Annotated, Code of Federal Regulations and Code of Massachusetts Regulations (where applicable), and the minimum period for which the record must be maintained.

4. To destroy records included on this schedule, the Retirement Board's records custodian should submit to the Supervisor of Public Records two copies of a letter substantially in the form suggested by the sample shown here, indicating the schedule number, estimated volume, and inclusive dates for each type of record to be destroyed. One copy of this letter will be returned to the requester with the approval of the Supervisor. Following receipt of this approval, all records included in the written request may be legally destroyed subject to any condition stipulated thereon. Any record may be retained beyond this period of time at the discretion of the records custodian.

5. To destroy a record not included on this disposal schedule, the records custodian should submit a letter in duplicate to the Supervisor indicating the title, inclusive dates of each item, and alternate sources (if any) of the record and /or information contained therein. Submission of a sample of the record, whenever possible, will expedite action on the request.

6. Before submitting destruction requests to the Supervisor, be sure that the prescribed disposal period has fully expired for each record to be destroyed. Where this refers to "completion of satisfactory audit," include these and other variable dates as well, so that the eligibility for destruction of the records in question may be checked. Where items dated within the current fiscal year have already been audited, they should nonetheless be retained through June 30 or later, as necessary.

7. In each instance in which the disposal period is "after exhaustion of benefits and satisfactory audit thereof," benefits should be regarded as not having been exhausted until benefits due both the member and beneficiaries have been paid in total.

8. For further information regarding this disposal schedule, contact: Supervisor of Public Records, Archives Division, Massachusetts Archives at Columbia Point, 220 Morrissey Boulevard Boston MA 02125. Telephone: (617) 727-4062.

SAMPLE LETTER TO REQUEST PERMISSION TO DESTROY RECORDS

LETTERHEAD
(Retirement Board)

DATE:

Secretary of State
Supervisor of Public Records
Archives Division-Records Management Section
Massachusetts Archives at Columbia Point
220 Morrissey Boulevard
Boston, MA 02125

Dear Supervisor:

This is to request authorization for the destruction of records included on the Retirement Board Records Disposal Schedule as follows:

SCHEDULE NUMBER

17.8

17.9

17.23

INCLUSIVE DATES

January 1980 to June 30, 1981*

January 1940 to June 30, 1988

January 1960 to June 30, 1988**

Estimated volume: 18 cubic feet

Very truly yours,

(signature of legal custodian)

* Last audit of Board accounts satisfactorily completed as of June 30, 1988.

** Benefits due members and beneficiaries have been exhausted.

APPROVED:

DATE:

Supervisor of Public Records

RETIREMENT BOARD

DS-17-89

NUMBER	TITLE	STATUTORY REFERENCE	DISPOSAL PERIOD
FOR THE PURPOSES OF THIS SCHEDULE, THE TERM "AUDIT" REFERS TO THE EXAMINATION OF BOARD ACCOUNTS CONDUCTED BY THE PUBLIC EMPLOYEE RETIREMENT BOARD.			
ADMINISTRATIVE AND ACCOUNTING			
17.1	Accounts Journal	840 CMR 4.01	Permanent.
17.2	Amount to be Paid to Pension Fund, Actuary's Notification	c.32 s.22 (7)(c)(i)	After audit.
17.3	Amount to be Paid to Pension Fund, Certification to Mayor or Selectmen	c.32 s.22 (7)(c)(iii)	After audit.
17.4	Annual Report (to Mayor or Selectmen)	c.32 s.(5)(i)	After use, provided one mint published copy is retained permanently by county.
17.5	Annual Report (to PERA)	c.32 s.20 (5)(h) c.32 s.23 (2)(e)	7 years.
17.6	Audit (PERA)	c.32 s.22 (1)(c)	When superseded.
17.7	Cash Book	840 CMR 4.01	7 years.
17.8	Checks, Cancelled	c.32 c.260 s.2	7 years.
17.9	Check Registers	c.32 c.260 s.2	7 years.

RETIREMENT BOARD

DS-17-89

NUMBER	TITLE	STATUTORY REFERENCE	DISPOSAL PERIOD
7.10	Election to Board, Ballots	c. 32 s. 20(3)	2 years or after audit, whichever is later.
7.11	Election to Board, Nomination Papers	c. 32 s. 20(3)	2 years or after audit, whichever is later.
7.12	Elections, Notice of	c. 32 s. 20(3)	2 years or after audit, whichever is later.
7.13	Establishment of System, Certificate of	c. 32 s. 28(3)	Permanent.
7.14	General Ledger	840 CMR 4.01	Permanent.
7.15	Investment and Interest Record	c. 32 s. 23(2)	After audit following maturation or divestment.
7.16	Minutes of Retirement Board Meetings	c. 32 s. 20(5)(a)	Permanent.
7.17	Monthly Posting of Individual Deductions	c. 32 s. 23	4 years.
7.18	Payroll Warrant of Payments to Retirees and Beneficiaries	c. 32 s. 23(2)	After audit.
7.19	Supplementary Rules	c. 32 s. 21(4)	Until superseded.
7.20	Tax Withholding Statements (W2-P)	26 CFR 1.6001-1	4 years.
7.21	Trial Balance Book	840 CMR 4.01	7 years.
7.22	Vouchers	c. 32 s. 23(2)	After audit.

RETIREMENT BOARD

CDS-17-89

NUMBER	TITLE	STATUTORY REFERENCE	DISPOSAL PERIOD
17.23	RETIREMENT BENEFIT CASE FILES Retirement Benefit Case Files (The remaining items on this schedule are constituent elements of the Retirement Benefits Case File, but may be treated as individual record series for the purpose of disposition.)	c. 32	After exhaustion of benefits and satisfactory audit.
17.24	Accumulated Total Deductions, Request for Return to Member Form	c.32 s.11	After age 70.
17.25	Annual Report of Earnings for those on Disability	c.32 s.91A	7 years.
17.26	Application by Department Head for Retirement of Member (PERA 10-2A)	c.32 s.16(1)	After exhaustion of benefits and satisfactory audit.
17.27	Application by Member for Voluntary Retirement Benefits (1-1A)	c.32 ss.1-28	After exhaustion of benefits and satisfactory audit.
17.28	Application for Widow's Pension (S3, S7)	c.32 s.101	After exhaustion of benefits and satisfactory audit.
17.29	Beneficiary (or Change of Beneficiary) Blank (5)	c.32 s.11(2) (c)	Until superseded or until exhaustion of benefits, whichever is earlier.
17.30	Certification that an 18- to 22-year-old Child is a Full-time Student	c.32 s.7(1)(a)(iii) c.32 s.12B	After child is no longer eligible and satisfactory audit.

RETIREMENT BOARD

DS-17-89

NUMBER	TITLE	STATUTORY REFERENCE	DISPOSAL PERIOD
17.31	Compulsory Retirement Allowance, Information Blank (2-2A)	c.32 s.5	After exhaustion of benefits and satisfactory audit.
17.32	Decisions by Contributory Re- tirement Appeals Board	c.32 s.16(4)	After exhaustion of benefits and satisfactory audit
17.33	Disability Transmittals to the Commissioner (PERA 10-1 to 10-16 and 10-18 to 10-24)	c.32 ss.6, 7	After exhaustion of benefits and satisfactory audit.
17.34	Employment Record Card (Accumula- ted Total Deductions)		After exhaustion of benefits and satisfactory audit.
17.35	Information Sheet to Calculate a Retirement Allowance		After exhaustion of benefits and satisfactory audit.
17.36	Membership Certificate Stubs	c.32 s.3	After use.
17.37	New Entrant Enrollment Blank (101-101A)	c.32	After exhaustion of benefits and satisfactory audit.
17.38	Notice of Injury (12)		After exhaustion of benefits and satisfactory audit.
17.39	Notification of Death		After exhaustion of benefits and satisfactory audit.
17.40	Notification to Department Head of Retirement of Member due to Compulsory Age (103)	c.32 s.12(3)	After retirement of member.
17.41	Notification to Individual Member of Retirement due to Compulsory Age (102)	c.32 s.12(3)	After exhaustion of benefits and satisfactory audit.

RETIREMENT BOARD

DS-17-89

NUMBER	TITLE	STATUTORY REFERENCE	DISPOSAL PERIOD
17.42	Notification of Separation Form Service (RS 30)	c.32 s.20(5)(b)	After exhaustion of benefits and satisfactory audit.
17.43	Options on Retirement, Election Form (4-4A)	c.32 s.12(2)(a-c)	After exhaustion of benefits and satisfactory audit.
17.44	Retirement Payments Card (206)		After exhaustion of benefits and satisfactory audit.
17.45	Survivorship, Extract of Board Vote Regarding (S-10)	c.32 s.12B	After use.
17.46	Survivorship, Information Sheet Determine Eligibility	c.32 s.12B	After exhaustion of benefits and satisfactory audit.
17.47	Survivorship Forms (S-1 to S-7)	c.32 s.12B	After exhaustion of benefits and satisfactory audit.
17.48	Transfer of Member's Funds to Another Board		After retirement of member.
17.49	Verification Letters	c.32 s.5	After audit.
17.50	Workmen's Compensation, Regular Deductions	c.32 s.14	After exhaustion of benefits and satisfactory audit.

Access

to

Records

SUPERVISOR OF PUBLIC RECORDS
Municipal Records Management Manual

ACCESS TO RECORDS

THE MASSACHUSETTS PUBLIC RECORDS LAW

The Massachusetts Public Records Law (PRL) M.G.L.A. chapter 66 provides that any person has an absolute right of access to public information. This right of access includes the right to inspect, copy or have copies of records provided upon the payment of a reasonable fee.

The Massachusetts General Laws broadly define "public records" to include all documentary materials or data, regardless of physical form or characteristics, which are made or received by any officer or employee of any Massachusetts governmental entity. As a result, all photographs, papers and electronic storage media of which a governmental employee is the "custodian" constitute "public records." There are, however, twelve narrowly construed exemptions to this broad definition of "public records." Herein will be reviewed the application of these exemptions as well as some of the other issues which arise when a request is made for access to government records.

1. The Request

There are no strict rules which govern the manner in which requests for public information should be made. Requests may be oral or written and may be made in person or through the mail. A requester is not required to specifically identify a particular record. Any request which provides the custodian with a reasonable description of the desired information is sufficient. Custodians are expected to use their superior knowledge of the records in their custody to assist the requester in obtaining the desired information.

All requests must receive a response as soon as practicable, without unreasonable delay and always within ten days. The response must be either an offer to provide the requested materials or a written denial. A denial must detail the specific legal basis for the withholding of the requested materials. The legal basis must include a citation to the statutory exemption upon which the custodian relies and must also explain why the exemption applies. A denial must also advise the requester of the right to seek redress through the administrative process provided by the Office of the Supervisor of Public Records.

The mandatory disclosure provision of the PRL only applies to information which is in the custody of a governmental entity at the time the request is received. Consequently, there is no

obligation to create a record for a requester or to honor prospective requests. It should be noted, however, that there is nothing which prohibits a custodian from responding to such requests.

A custodian's role in responding to a request is limited to the responsibilities already described. Inquiries into a requester's status or motivation for seeking information are expressly prohibited. Consequently, all requests for public records, even if made for a commercial purpose or to assist the requester in a law suit against the holder of the records, must be honored in accord with the prescriptions of the PRL.

2. Fees

A custodian is allowed to charge a reasonable fee to recover the costs of complying with a public records request. The fee must be assessed in accordance with a specific statutory provision or the Public Records Access Regulations (PRAR), 950 CMR 32.00. The PRAR provide that a custodian may charge a pro-rated fee of six dollars (\$6.00) per hour for "search time" and "segregation time" when more than twenty minutes are needed to respond to a request. "Search time" is defined as the time needed to locate a requested record, pull it from the files, copy it and return it to the files. "Segregation time" is the time needed to delete exempt items from a requested record. Additionally, a twenty cents (20¢) per page copying fee may be assessed for any size photocopy. When the request is for materials which are not susceptible to ordinary means of reproduction, such as photographs or computer tapes and diskettes, the actual cost of reproduction may be assessed to the requester. The fee for a computer printout, however, is fifty cents (50¢) per page regardless of the amount of time used to generate the printout.

3. The Exemptions

The statutory definition of "public records" (M.G.L.A. c. 4, s. 7, cl. 26) contains twelve exemptions which provide bases for withholding records in whole or in part. The exemptions are strictly and narrowly construed. Where exempt information is intertwined with non-exempt information, the non-exempt portions are subject to disclosure once the exempt portions are deleted. A review of the appropriate applications of the exemptions follows.

Exemption (a)

Exemption (a), also known as the statutory exemption, provides a basis for withholding from disclosure those documents which are "specifically or by necessary implication exempted f from disclosure by statute." An agency may use the statutory exemption as a basis for withholding requested materials where

the language of the statute of exemption relied upon expressly states or necessarily indicates the public's right to inspect records under the PRL is restricted.

Essentially, the exemption creates two categories of exempt records: records which are specifically exempted from disclosure and those which are exempt by necessary implication. Statutes which "specifically" exempt a record are those which expressly state that a record either "shall not be a public record," "shall be kept confidential" or "shall not be subject to the disclosure provision of the PRL." Statutes which exempt records by "necessary implication" contain language which expressly limits the dissemination of particular records to a defined group of individuals or entities. A statute will not provide a basis for exemption if it merely lists individuals or entities to whom the records are to be provided; it must expressly limit access to the listed individuals or entities.

Exemption (b)

Exemption (b) applies to those records which are:

Related solely to internal personnel rules and practices of the government unit, provided, however, that such records shall be withheld only to the extent that the proper performance of necessary governmental functions requires such withholding.

There are no authoritative Massachusetts decisions interpreting exemption (b). The general purpose of the cognate federal exemption, however, is merely to relieve agencies of the burden of assembling and maintaining for public inspection matters in which the public cannot reasonably be expected to have an interest. Materials relating to matters such as personnel's use of parking facilities, regulations of lunch hours and statements of policies concerning sick leave are examples of the types of records to which the exemption applies.

The language of the federal provision is duplicated in the first clause of exemption (b). The second clause of exemption (b), however, contains language which requires a more restrictive application. The addition of the qualifying second clause of exemption (b) evidences a legislative intent to create an exemption which is narrower in scope than the previously enacted, parallel federal exemption. Therefore, in Massachusetts a record custodian must demonstrate that the proper performance of necessary governmental functions requires the withholding of the requested information for the exemption to apply.

Exemption (c)

Exemption (c), the privacy exemption, is the most frequently invoked exemption. The language of the exemption limits its application to:

Personnel and medical files or information; also any other materials or data relating to a specifically named individual, the disclosure of which may constitute an unwarranted invasion of personal privacy.

The privacy exemption contains two distinct and independent clauses, each requiring its own analysis. The first clause creates a categorical exemption for personnel and medical information which relates to an identifiable individual and is of a "personal nature." As a general rule, medical information will always be of a sufficiently personal nature to warrant exemption. Personnel information is generally exempt if it is evaluative in nature. It should be noted, however, that public employees have a diminished expectation of privacy in matters relating to their public employment. Consequently, the public will have greater access to personnel information which relates to an individual's public employment than to the same individual's private activities.

The second clause of the privacy exemption applies to requests for records which implicate privacy interests but do not involve personnel and medical records. Its application is limited to "intimate details of a highly personal nature." Examples of "intimate details of a highly personal nature" include marital status, paternity, substance abuse, government assistance, family fights and reputation. Portions of records containing such information are exempt unless there is a paramount public interest in disclosure. Therefore, when applying the second clause of the exemption to requested records it is necessary to perform a two-step analysis: first, determine whether the information constitutes an "intimate detail of a highly personal nature"; and second, determine whether the public interest in disclosure outweighs the privacy interest associated with disclosure of the highly personal information. Consequently, the application of the second clause of the exemption can only be determined on a case by case basis.

Exemption (d)

Exemption (d), the government privilege exemption, provides a limited executive privilege for policy development. It applies to:

Inter-agency or intra-agency memoranda or letters relating to policy positions being developed by the agency; but this subclause shall not apply to reasonably completed factual studies or reports on which the development of such policy positions has been or may be based.

The exemption is intended to avoid release of materials which could taint the deliberative process if prematurely disclosed. Therefore, its application is limited to recommendations on legal and policy matters found within the deliberative process. Purely factual matters used in the development of government policy are always subject to disclosure. Factual reports which are reasonably complete and inferences which can be drawn from factual investigations, even if labeled as opinions or conclusions, are not exempt as deliberative or policy making materials. Therefore, only those portions of materials which possess a deliberative or policy making character and relate to an on-going deliberative process are exempt from mandatory disclosure.

Exemption (e)

Exemption (e) allows the withholding of "notebooks and other materials prepared by an employee of the commonwealth which are personal to him and not maintained as part of the files of the government unit." The application of exemption (e) is limited to records which are in the custody of a public employee but are not work-related. Examples of materials which are covered by the exemption include private diaries, grocery lists or family pictures which are in the office of a government employee. The exemption by its express terms cannot apply to records which are maintained as part of the files of a governmental unit.

Exemption (f)

Exemption (f), the investigatory exemption, provides a basis for withholding:

Investigatory materials necessarily compiled out of the public view by law enforcement or other investigatory officials the disclosure of which materials would probably so prejudice the possibility of effective law enforcement that such disclosure would not be in the public interest.

The exemption allows investigative officials to withhold materials which could compromise investigative efforts if disclosed. There is no blanket exemption, however, for records created or maintained by investigative officials. Therefore, a custodian must demonstrate a prejudice to investigative efforts in order to withhold requested materials. Accordingly, any information relating to an on-going investigation may be withheld if disclosure could alert suspects to the activities of investigative officials. Also, any confidential investigative techniques may be withheld indefinitely since their disclosure would prejudice future law enforcement efforts.

The exemption is also designed to allow investigative officials to provide an assurance of confidentiality to private citizens so that they will speak openly about matters under investigation. Accordingly, any details in witness statements which if released create a grave risk of directly or indirectly identifying a private citizen who volunteers as a witness are indefinitely exempt.

Exemption (g)

Exemption (g) is often relied on by custodians as a basis for withholding copyrighted plans and blueprints or product specifications submitted in connection with a bid or proposal. The language of the exemption, however, clearly limits its application to:

Trade secrets or commercial or financial information voluntarily provided to an agency for use in developing government policy and upon a promise of confidentiality; but this subclause shall not apply to information submitted as required by law or as a condition of receiving a government contract or other benefit.

Each of the six criteria contained in the exemption must be met for it to apply. Consequently, where trade secrets or commercial or financial information are provided to the government in connection with a contract bid or in compliance with a filing requirement the exemption will not allow the withholding of the information. Trade secrets and commercial or financial information must be provided voluntarily, upon an assurance of confidentiality and solely to assist the government in the development of policy to be exempt.

Exemption (h)

Exemption (h) is designed to ensure the integrity of processes used by government to procure goods and services by

allowing a custodian to withhold the proposals of early bidders from other interested parties. Specifically, it allows custodians to withhold:

Proposals and bids to enter into any contract or agreement until the time for the opening of bids in the case of bids or proposals to be opened publicly, and until the time for the receipt of bids or proposals has expired in all other cases; and inter-agency or intra-agency communications made in connection with an evaluation process for reviewing bids or proposals, prior to a decision to enter into negotiations with or award a contract to, a particular person.

The exemption addresses two types of records, each with its own time frame. Proposals and bids are exempt from disclosure until the deadline for their submission passes. This prevents late bidders from gaining an unfair competitive advantage over early bidders. The limitation on the duration of the exemption provides the public an opportunity to review the rejected proposals to ensure that tax dollars are wisely spent. The second clause of the exemption is similar to exemption (d) in its application. It allows government officials to review bids and proposals in an insulated environment but also provides for public review of all evaluative materials once a decision is made to enter into negotiations with the successful bidder or to award the contract.

Exemption (i)

Exemption (i) is legislative recognition of the need to keep confidential real estate appraisals which relate to parcels which the government seeks to obtain either through a purchase or an eminent domain proceeding. Its application, however, is limited to a defined time period. Specifically, the exemption applies to:

Appraisals of real property acquired or to be acquired until (1) a final agreement is entered into; or (2) any litigation relative to such appraisals has been terminated; or (3) the time within which to commence such litigation has expired.

The exemption applies to any estimation of value of property which involves an expert opinion. It allows the government to be in the same position in a land deal as any private party. Obviously, parties to a land deal could be at a bargaining disadvantage if required to disclose their appraisals of the subject parcel. The exemption ensures that the government will not be at a bargaining disadvantage by allowing the other party to use the PRL to gain access to an appraisal prior to completion of negotiations or litigation.

Exemption (j)

Exemption (j) allows custodians of firearm records to withhold from disclosure:

The names and addresses of any persons contained in, or referred to in, any applications for any licenses to carry or posses firearms issued pursuant to chapter one hundred and forty or any firearms identification cards issued pursuant to said chapter one hundred and forty and the names and addresses on sales or transfers of any firearms, rifles, shotguns, or machine guns or ammunition therefor, as defined in said chapter one hundred and forty and the names and addresses on said licenses or cards.

The exemption prevents individuals with a criminal intent from ascertaining who possesses firearms. It should be noted, however, that the scope of the exemption limits its application to identifying details. Therefore, once identifying details are deleted, the remaining portions of firearms records are subject to mandatory disclosure.

Exemption (k)

Exemption (k) provides an exemption for "that part of the registration or circulation records of every public library which reveals the identity of a borrower." The purpose of the exemption is to ensure that people may engage in intellectual pursuits in private. This avoids the chilling effect that publication of an individual's selected readings may present.

Exemption (l)

Exemption (l) provides a basis for withholding from disclosure

"test questions and answers, scoring keys and sheets, and other examination data used to administer a licensing examination; provided, however, that such materials are used to administer

another examination." It is a common sense exemption. Prior to its enactment, clever individuals interested in taking a licensing examination could use the PRL to gain access to the questions and answers of the upcoming tests. Exemption (1) ensures that no one who takes an examination can gain an advantage through the use of the PRL.

4. Computer Records

The PRL was drafted at a time when legislators could not have envisioned the impact computers would have on the government's ability to collect, store, compile and disseminate information. The legal principles embodied in the PRL, however, may be readily transposed into legal principles governing access to information maintained in an automated system.

The statutory definition of "public records" does not distinguish between traditional paper records and records stored in the computer medium. Rather, it provides that all information made or received by a public entity, regardless of the manner in which it exists, constitutes "public records." Computer cards, tapes or diskettes all are independent public records which are subject to the same requirements of the PRL as are paper records. Therefore, a custodian is obliged to furnish copies of non-exempt portions of computerized information at the cost of reproduction unless otherwise provided by law.

It should be noted, however, that just as a custodian is not required to create a paper record in response to a request for information, a custodian is not required to create a computer record in response to a request for information. Conceptually, a computer is like a large filing cabinet. The "files" in the cabinet consist of any compilations of information contained on a tape or a diskette which can be independently retrieved through the use of existing computer programs. A custodian is only obliged to provide access to the existing "files" of a cabinet. Therefore, a custodian is not required to create a new computer program to provide a requester with computerized information in a desired format.

For example, suppose a request is made for a computer tape or diskette which contains those portions of a computerized voters list which reveals the identities of all Democrats in a particular ward. The custodian, however, does not have a computer program which allows a copy from the master tape which specifically selects the desired information; to provide the requested information in the desired format requires the creation of a new program. In this situation, the custodian is only obliged to notify the requester that there is no specific record which is responsive to the request. The custodian

should also advise the requester of the available formats and let the requester determine which of the existing formats or "files" would fill the request.

It should be noted there is nothing which prevents a custodian from creating a program which will generate requested information in the desired format. In fact, the custodian can benefit from such an arrangement. The requester can be asked to pay for the creation of the program which, depending on the arrangement, may remain the property of the custodian. As a result, the custodian is able to add a new program to his library without any expense to the government.

5. The Supervisor of Public Records

A requester who is denied access to any requested information may petition the Supervisor for a review of the request. The Supervisor will then instruct a staff member, usually a lawyer or a legal intern, to contact the custodian and requester to ascertain the relevant facts and discuss the applicable law. The findings of the investigator are then reported to the Supervisor. The findings assist the Supervisor in making the decision. The custodian will receive an administrative order if the Supervisor determines that records are being improperly withheld or the proposed fee is excessive. If the custodian does not comply with the Supervisor's order, the case may be referred to the Department of the Attorney General or appropriate district attorney for enforcement in court.

A custodian may request a formal advisory opinion from the requester at any time. An advisory opinion will usually be issued within two or three weeks of the Supervisor's receipt of the request. A requester may also seek an informal opinion from the Supervisor's staff at any time. The number to call is (617) 727-2832, between 8:45 a.m. and 5:00 p.m.

6. Notes

1. G. L. c. 66, §10(a)(1986 ed.). All statutory references are to the 1986 Edition of the Massachusetts General Laws.
2. Id.
3. G. L. c. 4, §7(26).
4. See 950 C.M.R. 32.03 (defining "custodian" as the government employee who has access to or control of public records).
5. G. L. c. 4, §7(26)(a-1); see also Attorney General v. Assistant Commissioner of the Real Property Department of Boston, 380 Mass. 623, 625 (1980)(the statutory exemptions are to be strictly and narrowly construed); Attorney General v. Board of Assessors of Woburn, 375 Mass. 430, 432 (1978).
6. G. L. c. 66, §10(b); 950 C.M.R. 32.05(3).
7. 950 C.M.R. 32.05(4).
8. Id.
9. G. L. c. 66, §10(a-b); 950 C.M.R. 32.05(2).
10. 950 C.M.R. 32.08(1); see also 950 C.M.R. 32.08(7)(requirement that custodian produce an index which is sufficiently specific to allow the Supervisor to make a reasoned judgment as to the public records status of a document).
11. Id.
12. 950 C.M.R. 32.08(2).
13. G. L. c. 4, §7(26)(defining "public records" as materials which have already been "made or received" by a public entity); see also Westinghouse Broadcasting Company v. Sergeant-At-Arms of the General Court, 375 Mass. 179, 183-84 (1979)(custodian is not obliged to create a record in response to a request for information); 32 Op. Att'y Gen. 18 (May 18, 1977).
14. There is nothing which prohibits a custodian from offering to provide records on a subscription basis. Because prospective requests are not governed by the PRL, including its maximum fee limitations, the custodian is free to negotiate all terms of the arrangement. Consequently, a subscription service can be profitable for the custodian.
15. See G. L. c. 66, §10(a)(public records are to be provided to "any person"); 950 C.M.R. 32.05(5)(custodian prohibited from inquiring into a requester's status or motivation).
16. G. L. c. 66, §10(a); see generally 950 C.M.R. 32.06(fee provisions of regulations).
17. Id.
18. 950 C.M.R. 32.06(1)(c).
19. 950 C.M.R. 32.03.
20. Id.
21. 950 C.M.R. 32.06(1)(a).
22. 950 C.M.R. 32.06(f).
23. 950 C.M.R. 32.06(d).
24. G. L. c. 4, §7(26).
25. Real Property Department of Boston, 380 Mass. at 625.

6. G. L. c. 66, §10(a); Reinstein v. Police Commissioner of Boston, 378 Mass. 281, 289-90 (1979)(none of the statutory exemptions provide a blanket exemption from disclosure). 27. G. L. c. 4, §7(26)(a).
28. Attorney General v. Collector of Lynn, 377 Mass. 151, 154 (1979); Ottaway Newspaper Company v. Appeals Court, 372 Mass. 539, 545-46 (1977).
29. G. L. c. 4, §7(26)(a).
30. See, e.g., G. L. c. 41, §97D (all reports of rape or sexual assault "shall be confidential").
31. See, e.g., G. L. c. 6, §172 ("Criminal offender record information ... shall only be disseminated to: criminal justice agencies....")(Emphasis added).
32. G. L. c. 4, §7(26)(b).
33. Department of the Air Force v. Rose, 425 U.S. 352, 362-70 (1976).
34. See Jordan v. Department of Justice, 591 F.2d 753, 763-71 (D.C.Cir. 1978)(construction of cognate federal provision).
35. See Globe Newspaper Company v. Boston Retirement Board, 388 Mass. 427, 432-33 (1983)(where the language of a similar state statute differs in material respects from a previously enacted federal statute, a rejection or expansion of the legal principles embodied in the federal statute may be inferred).
36. G. L. c. 4, §7(26)(c).
37. Globe Newspaper Company, 388 Mass. at 432-34.
38. Id.; Brogan v. School Committee of Westport, 401 Mass. 306, 308 (1987).
39. Globe Newspaper Company, 388 Mass. at 442.
40. Connolly v. Bromery, 15 Mass. App. Ct. 661, 664 (1983) (evaluative materials are of a particularly personal and volatile nature).
41. Brogan, 401 Mass. at 308; Pottle v. School Committee of Braintree, 395 Mass. 861, 866 (1985); George W. Prescott Publishing Company v. Register of Probate for Norfolk County, 395 Mass. 274, 278 (1985); Globe Newspaper Company, 388 Mass. at 436 n.15; Hastings & Sons Publishing Company v. City Treasurer of Lynn, 374 Mass. 812, 818 (1978).
42. For example, incidents of misconduct are less personal if relating to the performance of official responsibilities. Similarly, an individual's public employment salary is a public record but the source or amount of private income is not public information.
43. Real Property Department of Boston, 380 Mass. at 625.
44. Id. at 626 n.2.
45. Collector of Lynn, 377 Mass. at 156.
46. G. L. c. 4, §7(26)(d).
47. See Vaughn v. Rosen, 523 F.2d 1136, 1144 (D.C.Cir. 1975) (construing cognate federal provision).
48. G. L. c. 4, §7(26)(d); see Environmental Protection Agency v. Mink, 410 U.S. 73, 89 (1973)(construing cognate federal provision).

49. See Moore-McCormack Lines, Inc. v. I.T.O. Corporation of Baltimore, 508 F.2d 945, 948 (1974)(construing cognate federal provision).
50. G. L. c. 4, §7(26)(e).
51. Id.
52. G. L. c. 4, §7(26)(f).
53. G. L. c. 66, §10(a); Reinstein, 378 Mass. at 289-90.
54. Bougas v. Chief of Police of Lexington, 371 Mass. 59, 62 (1976).
55. Id.
56. Globe Newspaper Company, 388 Mass. at 438 (explanation of "identifying details" and "grave risk of indirect identification").
57. G. L. c. 4, §7(26)(g).
58. Id.
59. See Datatrol Inc. v. State Purchasing Agent, 379 Mass. 679, 691 (1980)(the purposes of competitive bidding go beyond economy and efficient administration to the prevention of favoritism in the awarding of government contracts).
60. G. L. c. 4, §7(26)(h).
61. See discussion of the application of exemption (d), supra.
62. G. L. c. 4, §7(26)(i).
63. See Blacks Law Dictionary, p. 92 (5th Ed.)(definition of "appraisal").
64. G. L. c. 4, §7(26)(j).
65. Id.
66. G. L. c. 4, §7(26)(k).
67. G. L. c. 4, §7(26)(l).
68. See St. 1973, c.1050 (legislation providing for the current statutory definition of "public records"); see also "The Report of the First National Conference on Issues Concerning Computerized Public Records" which discusses the application of the legal principles embodied in the current definition of "public records" to computerized records. The report may be obtained by sending \$2.40 (to cover postage) to: The Division of Public Records, Room 1701, One Ashburton Place, Boston, Massachusetts 02108. Copies may also be acquired in person without charge.
69. G. L. c. 4, §7(26).
70. See 950 C.M.R. 32.05(4)(a custodian shall use his superior knowledge of his files to assist a requester in obtaining the desired information).
71. As discussed in note 14, supra, arrangements which do not apply to existing records are not governed by the provisions of the PRL or PRAR. Consequently, a custodian is free to set any fee for providing such services.
72. G. L. c. 66, §10(b); 950 C.M.R. 32.08(3).
73. G. L. c. 66, §10(b).
74. 950 C.M.R. 32.07.

Machine Readable Records

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MACHINE READABLE RECORDS

A. DEFINITION

In a simple sense, machine readable records are the product of machines, largely computers. The computer equipment, or hardware, produces records only in tandem with the controlling instructions, or software. Because machine readable records cannot be deciphered by the naked eye, the user must rely on the hardware and software partners which produced the data.

1. Status

Machine readable records are public records. M.G.L.A. c. 4 describes public records as all records "regardless of physical form or characteristics" which are made or received by public officials. This means that the provisions of M.G.L.A. chapter 66, the Public Records Law, govern automated records. Municipal officials have an obligation to manage and protect these records just as they manage and protect paper records.

There is no statutory basis however for the acceptance of machine readable records in a court of law. The court may require that the original textual record be produced.

2. Methods of Use

Computers have been used by government entities for more than twenty years, and will be used even more widely in the future. Municipalities frequently use computer technology for word processing, data base and financial applications. Many municipalities have micro (personal) computers which use diskettes or hard disks to record information.

Some municipalities use the data processing services provided by vendors. These privately operated service bureaus offer computer and storage services. The municipality may communicate directly with the service bureau mainframe via a dedicated line; in other cases, the municipality may not maintain an on-line data base and may receive only hardcopy reports of information that had been automated and then manipulated by the vendor.

Other municipalities maintain their own mainframe or mini computer; terminals may be centralized in one area or spread throughout the agency. These larger and more powerful computers use magnetic tapes or disk packs to record information.

3. Relationship with Textual Records

Machine readable records have a complex interrelationship with three types of textual records.

A textual description of the computer system hardware and the software program, called DOCUMENTATION, assist in using the automated system. Information must be entered into the computer; most frequently information is entered from textual documents, called SOURCE MATERIALS. The final result, whether it be correspondence, report or other record, is usually generated in a textual format; these are HARDCOPY PRINTOUTS.

Each of these textual records has a bearing on the usefulness and value of the machine readable records.

a. Documentation

Documentation is important for custom systems developed by programmers, as well as for those that are purchased as packages. Documentation describes the nature, purpose and layout of the automated system. Without this information, the machine readable records held by the system would be unusable. Documentation is of three types:

- 1) System documentation, which explains the system and related subsystem structures;
- 2) Program documentation, which explains the purpose and procedures of a given set of programs, and
- 3) Data file documentation, which explains the arrangement, content and coding of data files, how the actual information is arranged in a file. This includes: the records layout (containing the arrangement and structure of data elements in a logical record) and the codebook (containing an explanation of codes used to represent information in each data element in a logical record).

Complete documentation is crucial to the continued usefulness of the machine readable records and automated system. Documentation must be in writing and the use of abbreviations and codes should be avoided. As changes are made to the system, programs and data files layout, the documentation must be updated.

A record copy of all updated documentation must be maintained in a safe storage area and arranged in an accessible manner. This material should not be destroyed until the machine readable records and system are destroyed.

b. Source Materials

Information in machine readable records is frequently input from textual source materials. These source documents may have been designed primarily as data entry tools, or may be

documents that are used for a different application and are only peripherally data entry documents. The existence of source documents may affect the value of the machine readable records. If the source materials are more detailed than the automated records, they may be retained, rather than the machine readable version of the information. In other cases, the machine readable records will also be retained due to their ongoing value and manipulability.

c. Hardcopy Printouts

Information printed out from the automated system may take the form of reports, correspondence or other materials. In the case of word processed correspondence or other documents, the printout is the preferred copy. Some users that maintain on-line data bases prefer to retain the hardcopy reports, and destroy machine readable records periodically.

Before making such a decision, analyze the need for manipulable information. After the information is printed out and the tape destroyed, data cannot be easily altered or updated. It may be more useful to retain the machine readable information and destroy hardcopy reports when they are no longer useful.

B. LIFECYCLE

All records, including machine readable records, have a lifecycle. Controlling the lifecycle of records decreases costs and increases the efficiency of the operation. Machine readable records have certain unique characteristics that influence their creation, maintenance and disposition. These records are in many ways quite different from textual records and must be given special consideration.

1. Creation

a. Technological Dependence

Machine readable records are created using hardware and software partners: the computer and the controlling instructions. Because not all computers are compatible, chances are that the records created on one computer cannot be read by another computer. Also, information created using one type of software, may not be able to be read using another type of software. Once information is created on a computer, the same computer and software may be required to read that information. This means that it is very important to document the type of computer and software used to create machine readable records. Many computer users record this information on the diskette, tape, disk pack or cartridge itself.

The issue of compatibility is particularly relevant when new equipment and programs are purchased; will previously

purchased programs run on the new equipment? Can information compiled previously be maintained and accessed with the new program? Compatibility is crucial when backup copies of machine readable records are stored for several years; when they are needed, will it be possible to access them on new equipment?

b. Need for Labelling

Imagine looking for a record in a filing cabinet with no drawer labels. Opening drawers at random, you find that there are no labels on the file folders, and all records stored in sealed envelopes; you will have to open each envelope to identify the records. Machine readable records that have no external or internal labels are like records sealed in envelopes; each must be opened to be identified.

Tape reels, disks and other machine readable media should be affixed with external labels that identify the name of the series, the date the records were started and the date they may be destroyed, the names of the hardware and software that were used to create the records, and other information as desired. This will permit the information stored on the tape or disk to be identified without using the hardware to "open" or access each record.

Internal labelling of files on disks is usually accomplished through a "Directory" of files. The "Directory" permits the user to enter a limited number of characters which act as a title; the "Directory" list of titles acts as a table of contents. In most cases, the file cannot be fully identified in the "Directory;" this leads to abbreviations that are not fully understandable. It is important to use a standard system for labelling individual files.

There are many different ways to encode internal file labels; encoding must be standard and consistent. Encode word processing file labels by using an alphabetic character to represent the office of origin, type of record, type of transaction and the receiver. A date, such as date sent, is added to indicate chronology and to make the encoded title unique. For example, the following characters may be used to describe the values listed below:

Code	: Office of Origin	: Type of Record	: Type of Transaction	: Receiver (Directed to)	: Date
a	: Mayor	: Letter	: Informational	: Staff	:
b	: Legal	: Contract	: Request	: Vendors	:
c	: Accounting	: Press Release	: Response	: Financial Offices	:
d	: Purchasing	: Internal memo	: Inquiry	: Public	:
:	:	:	:	:	:

An internal memo from purchasing to all staff, sent out on

August 3rd, would be listed in the "Directory" as "ddaa8." This code should also be noted somewhere on the document itself.

Of course, when any internal labelling system is used, copies of the encoding chart, and a list of the files, their encoded titles and contents must be maintained on paper. This will assist searchers who are not familiar with the coding system and files.

c. Process of Creation

A crucial aspect of this part of the records lifecycle is the process of creation. The way machine readable records are created differs significantly from textual records. In most cases, a clerical worker has responsibility for typing a finished version of a document. This interim records keeper can, if the situation warrants, copy and file the document during the process.

This contrasts with the creation of machine readable records, where, more and more frequently, records creators work directly with the computer, composing and typing a finished document at the same time. No draft versions remain. Since there is no interim records keeper, there may be no copy printed for the file, and/or the original document on the system may be purged.

Avoid situations where the only copy of the record is on a diskette or tape. Records of long term and permanent value, and records which are intended for use in textual format, should be maintained in textual format. These records should be printed out on paper or on computer output microfilm.

Information in data bases may be too voluminous to consider printing out; a duplicate of this information should be held on magnetic media.

There are three reasons for these precautions: machine readable records are easily amended, manipulated and purged; magnetic media is easily recycled for re-use; and machine readable records are also very sensitive to environmental conditions.

2. Maintenance

Because of the special characteristics of machine readable records, they require more care than paper records. Paper records are durable; information typed or printed on paper will remain in place, even after ten, twenty or thirty years. Information in machine readable records are far more fragile.

a. Amendability

Paper is not readily reusable. Once a draft has been written or a document added to a file, there is little that can be done to change it. We may write a new draft or remove the document from the file, but the information on the paper itself remains.

Machine readable records do not have the same stability as do paper records. Information, in an automated system, exists only in a transitory state and can be updated, manipulated or purged easily and quickly, leaving no trace of the original information.

Amendability is one of the reasons why automated systems are preferred for many types of data; it is also the source of difficulties. Often the computer stores only the most recent information; when new information is added, the old information is deleted and the new information inserted. The ability of the computer to overlay information means that draft versions of materials may not exist. It may be difficult or impossible to trace policy changes, the development of decisions, etc. In the case of large data bases, such as those designed to maintain current information on individuals, it may be difficult to trace changes in location, services, status, etc.

In addition, due to the manner in which machine readable records are created, copies of outgoing documents may not be retained or record copies of documents may be retained only in machine readable format.

These difficulties can be ameliorated by the following procedures:

1. For policy or other important documents, print out copies of drafts at the close of each session during which vital changes have been made. When the document is complete, discard only those versions that do not contain significant amendments.

2. When designing data bases or other systems where information may be updated through overlay, analyze the possible uses of earlier information. Where would previous information be helpful? Where unimportant? Overlay should not be used where historical information is important. The program should be designed to retain the earlier information.

3. Official copies of documents should be backed up in textual or machine readable format. This second copy provides security for the official copy. Official copies of word processed documents, which are intended for use in textual format, should be maintained in textual format.

b. Reusability

Many machine readable media can be easily recycled. For example, a reformatted diskette can be used in the same manner, with the same results, as a new diskette. Magnetic tape has one-half the resale value as a new tape, and can be cleared of previous data in preparation for new data.

There is a greater temptation to destroy machine readable records to reuse media than there is to destroy textual records, as paper cannot be recycled as easily. The short term economic benefits of recycling machine readable media may sometimes result in the loss of the long term benefit of retaining the information.

Before recycling media, analyze future needs for the data it contains. Reconstructing the information is often far more expensive than maintaining the data in machine readable format. Rekeying is also quite expensive. If the data is likely to be used again, and manipulability is important, the data should be maintained in machine readable format.

If manipulability is not important, data may be printed out before the media is reused. Information that is printed out will lose its manipulability, but it will at least be preserved. Another alternative is computer output microfilm or microfiche (COM). COM takes the electronic information coming from the computer and converts it to micrographic images without the intermediary paper step. For this reason, COM is fast and economical. Conversion work can be contracted out to a service bureau.

c. Fragility

Machine readable media are sensitive to environmental conditions. Fluctuations or extremes in temperature and humidity, magnetic fields, dust and smoke can adversely affect machine readable records, causing data loss. This may result in disaster where irreplaceable original information is concerned.

Paper records can withstand temperatures of up to 300°F; machine readable records are destroyed at temperatures over 120°F. Paper can withstand humidity to the point of immersion in water if the ink is stable. Data in machine readable records is damaged at levels of humidity over 85%.

Machine readable records of long-term value (records needed for more than ten years) should be used and stored in areas where a constant temperature of 65°F plus or minus 3°F, and a relative humidity of 40% plus or minus 5% is maintained.

Machine readable records which are needed for ten years or less may be used and stored in less stringent conditions; a temperature range of 40°F to 90°F, and a relative humidity of 20% to 80% is acceptable.

But proper storage conditions for records in use is not enough to ensure the accessibility of the information stored in machine readable records. Since it is nearly impossible to restore machine readable records after a disaster, off-site storage or proper storage in a safe at town hall for back-up copies is essential. These back-up materials may be copies of the machine readable records in machine readable format, microform or textual formats.

Magnetic media used with mainframe computers should be periodically copied and sent to off-site storage. Perhaps a cooperative storage arrangement can be made with another municipality. The out-of-date copies can be recycled.

Media used in external storage devices such as floppy or hard disks can be copied and retained in safe storage conditions in the office. UL class 150 safes with a 2 or 4

hour rating is appropriate for tapes; UL class 125 safes with a 2 or 4 hour rating is appropriate for diskettes.

When volume is not a problem, information can be copied from machine readable records onto paper, which can be stored in a vault or safe.

Even under the best conditions, machine readable records have a lifespan that is approximately one-tenth that of paper. Tapes must be recopied before data loss begins, after eight to ten years.

3. Disposition of Machine Readable Records

What will happen to records when they are no longer active? Disposition is generally understood to mean the final actions that are taken with the records; usually this is transfer of the records to another owner, transfer of the information to another medium, destruction of the information (and records) altogether or permanent retention of the records. Retention periods, assigned by the Supervisor of Public Records, guide the disposition activities of municipalities.

a. Applying Disposal Schedules

Because machine readable records are governed by M.G.L.A. c 66, their disposal must be carried out under the Retention Schedules approved by the Supervisor.

Most records created on computers are simply automated versions of paper records listed on the Retention Schedules. These retention periods may be used for paper or automated records.

In other cases, the machine readable records are printed out and the paper maintained as the record copy. The machine readable record may then be destroyed as a duplicate-- without recourse to the Supervisor.

It may be that the machine readable records which are being created are not readily identifiable as a series listed on the Retention Schedules. Perhaps these machine readable records are drafts or interim records, unofficial records or ad hoc analyses, and may be destroyed without recourse to the Supervisor because a more complete, official record is being kept for the full retention period.

If the machine readable records cannot be identified as a series listed on the schedules, it may be that they compose a new series, one that has not yet been scheduled. In this case, contact the Records Management Unit. We will develop a retention period for the new series.

b. Disposition Planning

The purpose of disposition planning is to make sure that important information is available when it is needed, in a format that is accessible. It is accomplished by studying the

schedules and by planning ahead to be certain that schedules are implemented properly. Disposition planning is crucial to magnetic media because of its short lifespan and the rapidly changing technology of the computer.

All media has a finite lifespan; unlike paper or microfilm, machine readable records have a very short lifespan. We will not outlive the high-quality hardcover books we buy, or the microfilm we use at the periodical desk at the library; we will outlive the diskettes we create-- unless they are recopied every eight to ten years, before significant deterioration has taken place.

This is a good argument for disposition planning. If records must be maintained longer than eight years, plan to print them out on good quality paper. In the case of tapes, the expense of recopying the tape is likely to be far greater than that of printing out the information on paper. Computer output microfilm can be used to create a miniaturized, long lasting copy of the information. Printouts or microfilm should be labelled with record series title and inclusive dates, so the information they contain is easily accessible.

Another argument for disposition planning is simply that technology changes-- quickly. The computers in use today will be scrap metal in less than 15 years. How can information of long term or even permanent value be accessed when it is trapped on a tape or diskette? There is a method by which magnetic media can be reformatted so it can be used on different types of computers-- but again, this has a cost, and needs to be planned in advance, before information becomes unreadable and useless.

While the "paperless office" is now generally acknowledged to be a myth, it is a certainty that computer applications in government will continue to increase. Municipal officials need to prepare themselves for an "automated" future.

Microfilm

SUPERVISOR OF PUBLIC RECORDS
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MICROFILM

The problems of storage and retrieval of records cannot be solved by disposition alone. Large volumes of long-term or permanent records will continue to be created and place demands on the capacities of the municipality to store and service them. Increasingly, organizations in both the public and private sectors have been turning to miniaturization of documents, either on microfilm or on optical disk storage, to meet these needs. This section will deal exclusively with microfilm and its advantages and disadvantages for municipalities.

A. DEFINITION

Very simply put, microfilm is the reduced image of documents reproduced and stored on photographic film.

B. LEGAL STANDING

The laws of the Commonwealth make ample allowance for the use of microfilm in a legal context. M.G.L.A. c. 233 s. 79E accepts the Uniform Photographic Copies of Business and Public Records Act (for full text, see Uniform Laws Annotated, Master Edition, Volume 14) and makes microfilm copies of records admissible in court. M.G.L.A. c. 233 s. 79A provides for the certification of microfilmed copies. M.G.L.A. c. 66 s. 3 further states that microfilm is to be considered an acceptable medium in which to maintain public records.

C. BENEFITS OF MICROFILMING

There are a number of reasons for using microfilm, the most common of which are:

1. **Security.** Information on film is difficult to alter or falsify. Records on film are locked into place and cannot be lost, stolen or misfiled. The film can be used as a working or reference source and the original documents stored safely away from abuse or tampering. A master microfilm can be stored at an off-site location; if the working film is lost or damaged a duplicate copy can be made from the master.
2. **File Integrity.** The use of film obviates the necessity of removing records from the file system. A document on film stays exactly where it is; it cannot be lost, misfiled or

stolen, nor can it be tempered with or altered. Although it is possible to lose, misfile or have stolen an entire reel, fiche or aperture card (misfiles are much more common with fiche and aperture cards than with reels, for obvious reasons) the existence of a master copy allows quick and inexpensive replacement. Various indexing techniques are available to minimize the threat of misfiling fiche and aperture cards.

3. Space Savings. The most widely considered advantage of microfilm is the vast reduction in space requirements that can be achieved through its use. Microfilm can reduce the amount of space needed to store records by as much as 98%. Because of this reduction much more information can be stored within the working offices rather than in vaults. It must be noted however, that although many otherwise permanent records may be destroyed after microfilming, many series of records must be maintained in hard copy even after they have been filmed and that microfilm cannot therefore be considered as a total panacea for restricted storage space.

4. Access and Retrieval. Because of the space reductions achieved by microfilm, almost all an office's needed information can be stored within the office, eliminating the necessity of trips to the vault or attic; hours of the worst kinds of clerical work can be eliminated. Depending upon the quality and sophistication of the indexing and retrieval system, records can be accessed in seconds and, if necessary, paper copies can be readily created.

5. Cost Savings. Closely related to space savings and the speed of access and retrieval is the question of cost savings. In 1988, the International Information Management Congress estimated that the annual cost of maintaining and servicing one four-drawer file cabinet to be \$1,580.00 for an average business. The information within this cabinet could be reduced to one roll of microfilm. Obviously, the savings in space within the office and the reduction in the clerical labor required to service the files are significant. If permanent records are microfilmed, and the hard copy destroyed, the demand upon vault space decreases dramatically, thus decreasing construction costs for expanded vault facilities.

D. CANDIDATES FOR FILMING

Any records may be filmed. Decisions of whether to microfilm should take into account certain criteria such as the volume, physical condition, frequency of reference, and the legal retention periods of the records. Any records with permanent or long-term retention periods are excellent candidates for filming since this will serve to safeguard them and prolong their physical life. Since many otherwise permanent records may be destroyed after being properly microfilmed, this may also result in significant savings in space.

Cost-effectiveness of microfilming is measured by calculating the cost of filming against the cost of storing records in paper format. A large-volume series which has a short retention period may be a good candidate for filming because of the excessive amount of space it consumes.

Conversely, a long-term record series which occupies little space and is rarely referenced may not be a particularly good candidate for filming. In general, however, the longer a series must be maintained, the more likely it is that filming will be cost-effective.

E. MICROFILM FORMATS

There are two microfilm formats: roll film and flat film. The decision as to which format to use is dependent upon the nature of the documents to be filmed and the use to which the film will be put.

1. Roll Film. Roll film is available either in an unprotected open reel format or enclosed in cassettes or cartridges. While open reel film is by far the cheapest of all microforms, it can be difficult to load and is more easily damaged by the environment or mishandling. Cassette and cartridge loaded film is better protected and very simple to load and unload on a reader or reader-printer. Since indexing is very simple in this format, document search is much facilitated.

Roll film is generally found in 35mm and 16mm sizes. Except for some older film, 16mm is now generally used for letter-size documents and 35mm for maps and plans. Roll film lends itself to the filming of sequential or chronological records which require little or no updating and would be the preferred format for such series as town meeting records, ledgers, valuation lists, vital statistics.

2. Flat Film. Flat film is available in microfiche, microfilm jackets, and aperture cards.

Microfiche is produced on 105mm film that is cut into 6 inch lengths. Fiche is generally produced using a "step and repeat" camera and is a much costlier format to produce than is roll film. Fiche lends itself especially to computer output microfilm (COM) application and to micropublishing, but is also used for other applications such as checks, payroll and invoices. Cameras that produce fiche generally can accept only individual documents. Although it is possible to create fiche of bound volumes it is not recommended.

Microfilm jackets are polyester cards of the same 4x6 inch size as microfiche with sealed channels created along their horizontal axis. Frames of developed film are then "stuffed" into the channels. Jackets are useful for subject-specific applications where reference must be made to a

particular individual, property or other subject. These are easily updateable and very simple to reference but do not provide the file integrity of roll film or microfiche and are understandably more expensive. The primary municipal applications of jacket microfiche would be personnel files and Assessors' property cards.

Aperture cards are standard-sized tab cards in which a hole has been cut to accommodate a frame of developed microfilm, usually 35mm. Information relative to the film image is typed on the card itself. This format has its primary application in filming plans, drawings, maps and blueprints for DPW, engineering or other such offices.

F. IMAGE RETRIEVAL

1. Hardware. Unless microfilm is to be used only as a security device, it will be necessary to provide a reader or reader-printer to read the filmed documents. Readers and reader-printers range from very simple devices for reading microfiche to massive computer-linked units which can automatically load film, retrieve images and make multiple copies. The choice of retrieval equipment will depend upon the type of film being used in the office, its frequency of reference, and the need to generate hard copy of the images. The simplest and cheapest of these machines is the microfiche reader. Roll film readers are considerably more costly. Readers are available which are capable of accepting both formats. For many offices a simple reader will be sufficient; however, it must be borne in mind that the public records laws apply to microfilm as well as to paper and requested records must be produced. It is therefore desirable to have at least one reader-printer available in municipal offices.

Reader-printers can be extremely complicated and costly, but for most municipal purposes the simplest, having the fewest "bells and whistles," are the best. The advent of the "personal" and plain paper photocopying machines has allowed manufacturers to develop a number of very fine, compact, easy-to-use and relatively inexpensive reader-printers.

2. Indexing. There are a number of ways in which microfilm can be indexed. Roll film can be indexed by odometer reading, that is, by the number of inches, of film as indicated by a dial on the reader. It may also be indexed by blip coding. In this type of indexing, a small path of constant size and density is recorded on the film as each document is photographed. These "blips" can then be read by a photoelectric cell either integral to the reader or available as an add-on. By recording the documents as they are filmed an accurate index can be created with each blip corresponding to a single document.

There are a number of other methods for indexing roll film including bar codes and other more esoteric methods for computer assisted retrieval (CAR) but these are not considered cost effective for any but the largest municipalities.

Aperture cards and microfilm jackets, since they deal with single subjects, can simply be labelled across the top and filed as any other file.

Like jackets and aperture cards, microfiche may also be labelled across the top and filed normally. However, fiche can hold over 200 images and while the eye-readable heading may give a general idea of the contents, it is often desirable to provide an additional index to direct the user to the desired image. Since fiche is made up of uniform rows of images on both horizontal and vertical axes, the most convenient form of indexing is by referencing the image to a grid system such as A1, A2, A3,...B1, B2, B3...C1, C2, C3...etc. The municipality's microfilm vendor will be able to advise on the best index to use and should be able to provide a customized index as desired.

6. STORAGE

A silver halide master film should always be made in accordance with the specifications of 950 CMR 39.00, Rules and Regulations on the Use of Microfilm (see Appendix). This copy should be stored at an offsite location, either in a vault operated by a private vendor or in the Office of Administration and Finance vault at the Massachusetts Archives at Columbia Point, or other facility where the proper environmental conditions can be maintained. The master copy is a security copy and should never be stored in the same facility with the working copies. For long-term archival storage of film the ideal storage conditions are a temperature of 70°F. or below and a relative humidity of 40% or below. For short-term storage a temperature of below 90°F. and relative humidity of below 60% are acceptable. For the storage of any film, the classic "cool, dry place" is most desirable.

Microfilm is susceptible to damage from various sources such as heat and moisture, dirt, improper handling, and chemical fumes. Diazo film will release fumes that will attack the emulsion of silver halide film and the two types should not be stored in proximity to one another. Fumes from paints and solvents will also attack films and they should not be stored near these substances and should be removed to a different location during the use of paints and solvents.

APPENDIX

Destruction of Microfilmed Records

Rules and Regulations on the Use of Microfilm

Selecting Microfilm Services

DESTRUCTION OF MICROFILMED RECORDS

Acting under M.G.L.A. c. 66, s. 8, the Office of the Supervisor of Public Records has developed policy in regard to the retention or destruction of original hard copy records after these records have been microfilmed. The objective of this policy is to see that the most valuable records in municipal custody are preserved perpetually in their original form, even though they are microfilmed.

In developing this policy we have examined the records retention schedules of various departments. (If a department does not have such a schedule, please contact the city or town clerk or this office.) Many records on these schedules with a "permanent" retention period may be considered for destruction after microfilming (always providing written permission has been obtained from the Supervisor of Public Records and that microfilm standards comply with state regulations 950 CMR 39.00). The storage space realized in these instances will complement the security and retrieval benefits of microfilm. However, the records on these schedules listed below must be preserved in their original hard copy form, even after microfilming, because of their historical, legal, intrinsic or artifactual value.

Should there be any questions about this matter, please contact this office at 617-727-4062.

ASSESSORS

- 1) All records created prior to 1870
- 2) Meeting Records (1.65)
- 3) Recapitulation of Tax Rate
(signature copy of) (1.73)

TOWN AND CITY CLERK

All records created prior to 1870

ASSIGNMENTS

All records created prior to 1870

Fenceviewers (2.2) (3.2)

Wage (2.3) (3.3)

CHARTERS

- 1) Adoption, certificate of (2.12) 3.11)
- 2) Adoption, petition for (2.13) (3.12)

- 3) Final report (2.14) (3.13)
- 4) Preliminary Report (2.17) (3.16)
- 5) Receipts and expenditures, account of (2.18) (3.17)

CHATTEL MORTGAGES

- 1) Pre-Uniform Commercial Code, pre-1920 (2.19) (3.18)

ELECTIONS

- 1) Board of Registrars, Records of (2.25) (3.24)

GENERAL

- 1) By-laws and Ordinances (including written approval of Attorney General) (2.46) (3.61)
 - 2) Church Records (2.47) (3.45)
 - 3) Declarations of Trust (2.52) (3.50)
 - 4) Deeds (Cemetery Lots) (2.53) (3.51)
 - 5) Lowlands, Petition/Order for Road to (3.58)
 - 6) Minutes of City Council/Board of Alderman (3.60)
 - 7) Proprietor's Records (2.62) (3.64)
 - 8) Rules, Regulations of all Town and City Boards and Officers (2.66) (3.68)
 - 9) Special Permit Granting Authority, Records of (2.66A) (3.69)
 - 10) State Audit (Town and City Accounts) (2.67) (3.70)
 - 11) Street List (2.68) (3.71)
 - 12) Town Meeting Records (2.69)
 - 13) Wills (Perpetual Care of Cemetery Lots) (2.70) (3.76)
- #### PLANNING BOARD
- 14) Plans and Records (2.98)

PUBLIC WAYS

- 15) Board of Survey, Plans submitted to (2.108) (3.116)
- 16) Layouts/Alterations/Discontinuations, Record of (1.110) (3.118)

VITAL STATISTICS

- 1) All Records (2.118 - 2.130) and (2.132 - 2.143) (3.125 - 3.137) and (3.139 - 3.150)

ZONING BOARD OF APPEALS

- 1) All records created prior to 1870
- 2) Decisions and Proceedings (i.e. all official forms relating to the appeal process) (2.146) (3.153)
- 3) Rules (2.147) (3.154)
- 4) Subdivision Control Law, Proceedings Under (2.148) (3.155)

COLLECTORS

- 1) All records created prior to 1870
- 2) Commitment Books (all taxes and receivables) (4.15)

TREASURERS

- 1) All records created prior to 1870
- 2) Annual Report (5.6)

BOARD OF HEALTH

- 1) All records created prior to 1870
- 2) Burial or Removal Permits (R-309) (7.13)
- 3) Meeting Records (7.31)
- 4) Rules and Regulations (7.36)

SELECTMEN'S OFFICES

- 1) All records created prior to 1870
- 2) Minutes (9.14)

- 3) Boundary Triangulation Points (as determined by State DPW) (9.21)
- 4) Description of Obliterated Town Markers (9.22)
- 5) Perambulation Records (9.23)
- 6) Plan for Boundary Change (9.24)
- 7) Proposal for Boundary Change (9.25)
- 8) Ratification and Acceptance of Boundary Change by General Court (9.26)
- 10) Annual Reports (9.55)
- 11) Deeds/Leases (9.58)
- 12) All records created prior to 1870

FIRE DEPARTMENT

- 1) All records created prior to 1870
- 2) Fire Department Record (summary record of daily operations, known variously as Daily Blotter, Fire Alarm Records, etc.) (10.1)
- 3) Fire Station Journal (10.2)

FIRE DISTRICT

- 1) All records created prior to 1870
- 2) Annual Reports (11.1)
- 3) Fire District Board Minutes (11.4)

SEALER OF WEIGHTS AND MEASURES

- 1) All records created prior to 1870
- 2) Office Record and Ledger (13.5)

LICENSING BOARD

- 1) All records created prior to 1870
- 2) Annual Reports (15.1)

- 3) Hearing Records (15.8)

PUBLIC WORKS

- 1) All records created prior to 1870
- 2) Annual Reports (16.1)
- 3) Hearings (Meeting Minutes) (16.9)
- 4) Cemetary Records (16.25)

CONSERVATION COMMISSION

- 1) All records created prior to 1870
- 2) Annual Reports (18.1)
- 3) Hearing, Meeting Minutes (18.3)
- 4) Engineering Drawings (plans) (18.14)

BUILDING DEPARTMENT

- 1) All records created prior to 1870
- 2) Plans and specifications of Building included in the State Register of Historic Places, or eligible for inclusion (19.7 (d))
- 3) Annual Report (19.12)

SCHOOL DEPARTMENTS

- 1) All Records Created Prior to 1870
- 2) Minutes of School Committee Meetings (20.06)
- 3) Regional District Planning Board:
Agreement on Proposals for Formation of Regional School Districts (20.10)
- 4) School Committee Report, Annual (20.11)
- 5) Superintendent of Schools, annual report of (20.14)

SECRETARY OF STATE

REGULATION FILING AND PUBLICATION

1. Regulation Chapter Number and Heading:

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2. Name of Agency:

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950 CMR

39.00 Regulations on Using Microfilm

Under the provisions of Massachusetts General Laws, Chapter 30A, Section 6 and Chapter 233, Section 75, this document may be used as evidence of the original documents on file with the State Secretary.

Compiled as in full force and effect: 3/17/89

A true copy attest:


MICHAEL JOSEPH CONNOLLY
Secretary of State

950 CMR 39.00: REGULATIONS ON USING MICROFILM

Section

- 39.01: Scope
- 39.02: Definitions
- 39.03: Film Base Materials
- 39.04: Preparation of Film
- 39.05: Storage
- 39.06: Inspection

39.01: Scope

The minimum standards set out in 950 CMR 39.00 shall be adhered to in all microform applications to records the retention of which has been designated as more than fifteen years by the Records Conservation Board for the records of the Commonwealth and by the Supervisor of Public Records for the records of counties, cities and towns. 950 CMR 39.00 shall apply to all in-house preparations of such records, as well as to work contracted with microfilm service bureaus. It is the responsibility of the contracting agency to inform the microfilm service bureau of the requirements of 950 CMR 39.00.

39.02: Definitions

Definitions appropriate to 950 CMR 39.00 can be found in the National Micrographics Association (NMA) publication, Glossary of Micro graphics, TR-2-1980, or the latest revision thereof.

39.03: Film Base Materials

(1) Original film. All microfilm records regulated by 950 CMR 39.00 shall be generated on silver halide film. All such film shall conform to the standard enunciated in the American National Standards Institute publication, Specifications for Safety Photographic Film, ANSI PH 1.25 - 1976. Such film shall also comply with the minimum standards of quality approved for "archival" photographic records by the American National Standards Institute, as described in: Specifications for Photographic Film for Archival Records, Silver-Gelatin Type on Cellulose Ester Base, ANSI PH 1.28 - 1981; and Specifications for Photographic Film for Archival Records, Silver-Gelatin Type on Polyester Base, PH 1.41 - 1981.

(2) Duplicates. The original, or 'first generation' silver film shall be maintained for security purposes and not for reference. At least one duplicate copy of all records filmed shall be prepared for reference purposes. Duplicate copies for reference or additional duplicate copies for security may be of the diazo, silver halide or vesicular composition. Duplicates shall be commensurate with the quality of the original.

39.04: Preparation of Film

(1) Original Records. Proper care shall be taken in the preparation and arrangement of original records for filming to see that a true and accurate reproduction will be made. All staples, paper clips, folds, attachments, etc. shall be removed before document filming. Source documents shall be arranged and filmed in a manner consistent with their customary reference and usage.

(2) Reduction Ratio. Where a planetary camera is used, roll film application, in simplex mode, of documents of conventional size (8 x 11 or smaller) shall not exceed the limits of medium reduction (i.e., 30X). Duplex shall not exceed 32X. The reduction ratio employed in the filming of oversize documents may be adjusted consistent with above. Where a rotary camera is used, roll film applications, in simplex mode, of documents of conventional size (8 x 11 or smaller) shall not exceed 32X.

It should be observed that reduction ratios of 24X are regarded as optimal in regular (16 mm) roll film production. Unitized microforms also are becoming standardized on the basis of 24X. Certain applications may require variations

39.04: continued

from this standard. For example, lower reduction may be beneficial where 35 mm film is used; higher reduction may be necessary where 105 mm film is used or where duplex filming is performed on a rotary camera. While such factors may necessitate variations, the 24X optimum shall be followed as closely as possible.

The reduction standard for computer output microfilm (COM) is 24X or 48X, as defined in the American National Standard, ANSI/NMA MS 2 - 1977.

Regardless of format, the guiding consideration in establishing a reduction ratio shall be the reproduction of readable records of film, which shall be system-compatible in usage.

(3) Resolution. Resolution shall be sufficient for the production of film capable of being used in compatible readers, producing therein fine detail and sharpness of image. Resolution quality shall be such as to permit accurate return of information on film to hardcopy.

The method for determining the minimum-required resolution shall conform to the Quality Index Method of determining resolution as given in the National Micrographics Association Standard Practice for Operational Procedures Inspection and Quality Control of First-Generation Silver-Gelatin Microform of Documents, MS 23-1979. When planetary cameras are used at a reduction ratio of 1:24, the 5.0 pattern shall be obtained. When rotary cameras are used at a reduction ratio of 1:24, the 3.6 pattern shall be obtained as an absolute minimum, although the 4.0 pattern should be regarded as the minimum standard wherever possible.

The rotary test target shall conform to the Standard Test Chart for Rotary Microfilm Cameras, ANSI/NMA MS17-1981. Planetary camera targets shall conform to the target described in Figure 4 of NMA MS 23-1979.

(4) Density. Throughout filming, density shall be monitored constantly. The qualitative significance of density requires this constant supervision and control over the parameters of density, as filming occurs. Density values shall be such that exposed film shall have clear and open lines, as well as an absence of spread and/or widened letters (characters).

The most favorable background density value, in the case of first generation film, is 1.1 ± 0.2 , excepting computer output microfilm, the optimal background density value of which is 1.9 ± 0.1 . Somewhat lower density values may be necessary when filming deteriorated documents, or items with particularly low contrast. (A full and informed review of the issues of resolution and density values is contained in NMA MS 23 - 1979.)

(5) Film Identification. Specifications for film identification should be followed as given in the Recommended Practice for the Identification of Microforms, ANSI/NMA MS 19-1978.

In reel film applications, standard targeting procedures shall be employed. These procedures shall include targeting for start/end of film record, camera operator's report, and records identification. Other targets, including start file, or space targets, shall be used as necessary.

At a minimum, identification targets shall display the following information: name of the agency by which records are held; the title of the records (with identification of contents if not evident from series title); the microfilm reel number; camera number (where applicable); security classification (if any); the date of filming; and where possible, the inclusive dates, numbers, names or other data identifying the first and last records on the roll.

Unitized microforms (i.e., fiche, aperture cards, and jacketed film) shall contain records identification information in eye-readable headings in the appropriate places at the top (heading area) of the film material, or, on the film jacket.

Any indexes, registers, or other finding aids shall be microfilmed and located in a readily identifiable place within the collection on microfilmed records.

(6) Film Processing. As soon after the date of exposure as possible, (ideally within 24-48 hours), all film shall be processed in order that the film images be properly fixed.

Hypo-residue (sodium thiosulfate) shall meet the standards defined as

39.04: continued

"archival" in the American National Standard, ANSI Methylene Blue Method for Measuring Thiosulfate and Silver Densitometric Method for Measuring Residual Chemicals in Film, Plates and Papers, PH 4.8 - 1978. In all such cases, film shall be washed to reduce the hypo residue to within allowable tolerances as defined in ANSI PH 4.8 - 1978. The amount of thiosulfate ion residue shall be greater than 0 and less than 0.7 micrograms per square centimeter.

To confirm these tolerances, the chemical testing of processed film shall be required. The Methylene Blue Method shall be used in meeting this requirement as specified in ANSI PH 4.8 - 1978. If reversal processing will be used, it must be full photographic reversal and not the halide-type reversal.

(7) Post-filming Inspection. As soon after processing as possible, all film shall be inspected for errors and quality. This shall include a resolution check. Inspection reports shall be prepared detailing defects and errors, if any, and indicating any corrections which may be made. Said reports will be returned to the public custodian of the records involved.

In regard to roll film, corrections and/or retakes are to be spliced in at the beginning of each reel in a retake section along with targets for retake certificates. Equivalent procedures shall be applied in the correction of unitized microforms.

39.05 Storage

Standards for storing original or duplicate film shall comply with ANSI Practice for Storage of Processed Safety Photographic Film, PH 1.43 - 1980. In regard to the original film, the following storage standards shall be met:

(1) Reels and Cores. Microfilm stored in roll form shall be wound on cores or on reels of the type specified in ANSI Standard Dimensions for 100-foot Reels for Processed 16 mm and 35 mm Microfilm, PH 5.6 - 1968 (R 1974). Original roll film shall be stored on reels, etc. of inert plastic on non-corroding metal. Reels of other metals will be permitted only if such reels are well protected by lacquer, enamel, tinning, or other corrosion-resistant finish. Plastics and lacquers that might give off reactive fumes or emissions during storage shall not be used. The plastics must be free of peroxides. The use of rubber bands, tape, paper strips, etc. for fastening film onto reels or cores is prohibited. The materials used shall not ignite, decompose, or develop reactive fumes or vapors.

(2) Storage Containers. The film shall be packaged either in containers of metal or inert plastic of proven quality or paper-board boxes of low acidic composition. Containers shall be sealed when necessary to maintain prescribed humidity limits or to protect the film against gaseous impurities. If proper temperature and humidity are maintained as prescribed in 950 CMR 29.05(3), and if there is good ventilation and clean air in the storage area, the containers need not be sealed. All containers shall comply with ANSI Photographic Filing Enclosures for Storing Processed Photographic Film, Plates and Papers, PH 1.53 - 1978. Each container shall be properly labelled with the series title, reel numbers, and number of documents (where possible).

(3) Storage Facilities. All original film shall be housed in circumstances affording the maximum in security. Beyond essential measures to protect against fire and theft (see "Specifications for Safes and Vaults" issued by the Supervisor of Public Records), security shall be construed to mean the following:

(a) Constant temperature and humidity shall not exceed 70° F. and 45% respectively. Routine fluctuations shall not exceed 5% in either of those ranges over a twenty-four hour period.

(b) Each storage facility shall be equipped with a reliable thermometer and hygrometer for the constant monitoring of temperature and humidity.

(c) The facility shall offer protection from air-entrained impurities. Air conditioning with non-combustible air filters will be most suitable for this purpose.

(d) Films of a nitrate base, or those with nonsilver emulsion shall not be stored with silver halide microforms (in order to prevent degradation of the

39.05: continued

silver film caused by gases given off by variant film).

39.06: Inspection

Regular procedures for the periodic inspection of film shall be followed. These procedures are the responsibility of the custodian of the records.

(1) Inspection Procedure. At approximately two-year intervals, a one per cent sample of randomly selected rolls of microfilm shall be inspected. For each biennial inspection a different lot sample shall be chosen, allowing some overlapping to note any changes in previously inspected samples. The film shall be inspected for mold or fungus, excessive brittleness, film curl or discoloration, adherence of the emulsion to the base, evidence of adhesion and the presence of redox blemishes. The inspection for redox blemishes shall follow the guidelines in the National Bureau of Standards Handbook 96, Inspection of Photographic Record Films for Aging Blemishes. A re-reading of resolution test targets and a remeasurement of the film density shall be made. Cans, boxes or reels used to store the film shall also be inspected for evidence of rust, corrosion and other deterioration.

(2) Inspection Reports. On the basis of inspections, reports shall be prepared and filed regularly with the Supervisor of Public Records. Reports shall include:

- (a) quantity and identity of microfilm of permanent records on hand;
- (b) quantity and identity of microfilm inspected;
- (c) condition of the microfilm;
- (d) corrective action required if necessary.

(3) Deteriorating Film. If deterioration is found among the microfilm of permanent records, a more extensive inspection shall be undertaken to locate all deteriorating film. A silver duplicate shall be prepared to replace all deteriorating film. A silver duplicate shall be prepared to replace all deteriorating original copies.

REGULATORY AUTHORITY:

950 CMR 39.00: M.G.L. c .66, ss. 1, 3, 8, 8A, 11.

(950 CMR 40.00: RESERVED)

NON-TEXT PAGE

SELECTING MICROFILM SERVICES

These guidelines are intended to serve as an assistance to municipal, county and other public agencies which may be considering the use of private microfilm contractors for the filming of their respective records. In requesting quotations from microfilm service bureaus, the public agency needs to furnish information in sufficient detail to facilitate a reasonable and economical quotation. Contained herein are several lines of thought which, if pursued thoroughly, should aid the service bureaus and the contracting agency in the development of sound proposals.

In planning a commitment to microfilm, certain precautions should be observed. Applicable to any microfilm project, these considerations are related to microfilm as a potential records management device.

First and foremost, approach micrographics as a records management concept, not as a product. This involves seeing microfilm as a system, involving users, hardware, film and procedures. Hence, it is essential to start with a plan which defines the present records situation, establishes goals, and treats microfilm as a means of moving from the present to the goal. In this connection, the user (i.e., office personnel) must be included in the planning process.

In considering film as a records management tool, goals may need to be clearly stated. This means that the goals must speak to the most effective way of maintaining and using the information contained in the records under consideration. Maintenance and use of information, vis-a-vis film, may relate to providing additional security for the records, reducing the space requirements of records, improving the retrieval capabilities of the recorded information, or some combination of these factors. On the whole, the cost effectiveness of filming is enhanced to the extent that all three factors are addressed in the goal-setting leading to a film program.

It is also important to consider closely the visual appearance of film. The regular reference use of film makes appearance all-important. In working with transmitted images, using light and film, the quality and clarity of the image on film becomes much more important than ordinary characters on paper.

Lastly, realize that even though microfilm offers great management and cost benefits, it also holds great opportunity for expensive mistakes. Each application should be designed to fit the real needs of the particular records system in a systematic way. In the long run, the best results will come from close consultation with prospective contractors in the analysis of the specific records system. To help define this consultation, the following baseline issues are set forth.

Shopping for A Service Bureau

(1) Research. As with any purchase of services, the contracting agency needs to put together information which will permit it to discuss options intelligently with prospective contractors. An abundance of literature on microfilm and its several parts is available from a variety of sources. A portion of this literature is abstracted as an appendix to these guidelines for reference purposes. Of these, the *Introduction to Micrographics*, published by the National Micrographics Association, contains an excellent beginner's glossary. Examination of some of this material is a good means of preparing for discussions with vendors.

(2) Activities. As requests for bids are issued, it is a good idea to arrange a tour of the facilities of prospective service bureaus. A brief tour presents the opportunity to see the service bureau as a production operation and to understand better the process by which filming is accomplished. During the tour, attention should be directed to the available equipment, working environment, cleanliness and output quality. In addition, the contracting agency should seek to obtain information about other clients of the service bureau.

(3) Questions. Above all else, certain key questions of a general nature should be put to the service bureaus. Among these questions are:

How familiar is the service bureau with federal, state, industry and association standards? In addition to federal and state standards (see: *Public Records Regulations on Using Microfilm*, Office of the Secretary of State), a number of statements and standards have been issued by the National Micrographics Association and the American National Institute. The service bureau with which a contract is being developed should be able to demonstrate familiarity with these standards.

Can the service bureau offer training sessions to potential users? As above, the user (i.e., office staff) must be a central part of a planned microfilm operation. In order to prepare staff for implementation of a microfilm records system, it can be most valuable to work out training arrangements with a service bureau prior to the installation of a system.

What provisions are made by the service bureau for the physical security of records to be handled at the bureau's work site? If plans call for filming public records at the service bureau's production shop, the records will need protective arrangements equivalent to those in force when the records are in the possession of the regular custodian. Thus, a contract needs to reflect the manner in which the documents will be secured from loss by theft, fire, or other jeopardy while in the hands of the service bureau. Contract language should reflect any liability on the part of the vendor for damage or loss of records while in the possession of the service bureau.

How will the privacy of confidential records be secured during the filming process? To assure the confidentiality of any materials where privacy is an issue, the contracting agency should inquire into the service bureau's policy and procedure relative to the handling of such materials. Inasmuch as service bureaus frequently deal with such records and are acutely sensitive to the issue, such an inquiry is both a legitimate and necessary part of a proposal.

What is the service bureau's normal turnaround time for work of a conventional nature? To the extent that a public agency's records need to be referenced in the regular conduct of the agency's business, they should be off-site as short a period as possible. The ability of the service bureau to meet deadlines, then, becomes important. The contracting agency should consult the service bureau with respect to its peak and off-peak work times to determine what time frame would best meet the objective of having records out of the office for the least amount of time.

Does the service bureau have a contingency plan for the continuation of filming should there be an equipment failure? Consistent with the issue of time frame and deadlines, the service bureau should be able to give an indication of its production capabilities in the event of equipment breakdown. This might include the availability of backup equipment, or cooperative arrangements with another shop for the completion of pending work.

To aid prospective contractors in their response to requests for bids, the contracting agency should be prepared to include in the requests for bids hard information on several key subjects. In this way, the bids, and subsequent contract, can be drawn more sharply at the outset, leading to a more successful project implementation. In any event, much of this information will be essential if the service bureau is to present a reliable proposal.

(1) **Facilitation of Project.** Much of the data needed by the service bureau relates to the mechanical conduct of the filming project. This data permits the service bureau to analyze the systems needs of the project, as well as to plan the technical character of the film to be produced. Well founded data, in this regard, will lead to more responsive proposals from the prospective contractor.

(2) **Description of Records to be Filmed.** The vendor will need to know the physical characteristics of the records to be filmed: size, bound volume or loose document, paper or card stock, one-sided or two-sided, color of documents, and percentage of hard-to-film items (e.g., damaged documents, tissue paper records, etc.). Each of these factors will influence the film procedure of the service bureau. For example, documents of different colors likely will make necessary readjustments of the camera. Good, solid information on these factors, then, will lead to more realistic price quotations.

(3) **Arrangement and Editing.** A prerequisite to any filming activity is a determination regarding the arrangement and editing (where necessary) of records to be filmed. The contracting agency must make certain that the records are in appropriate order before they are filmed. The film vendor should be provided with clear, written directions in this regard. Improper sequencing of records on film will adversely influence indexing systems, as well as the general usefulness of the film. The same consideration applies to any editorial work which may need to be performed prior to the filming. If the service bureau is to conduct editorial work during the filming, the contracting agency should stipulate clearly the terms of such work.

(4) **Anticipated Use of Film.** In order that the most useful format be chosen, it is important that the contracting agency identify its reason(s) for considering microfilm usage. The contracting agency may plan to film solely for the purpose of having a security copy of the records. On the other hand, film rationale may include reducing records bulk for space saving purposes, or implementing more effective information retrieval systems by way of film. To the extent that anticipated use will influence the film format chosen, as well as equipment needs for the use of completed film, it is important to think through and express clearly the anticipated use of film during the proposal-writing stage.

(5) **Privacy/Confidential Condition of Records.** The service bureau will find useful, in advance, knowledge concerning any privacy or confidential characteristics of the records to be filmed. Such knowledge will assist the prospective contractor in determining the formatting of the film, as well as planning the arrangement or any special handling the records themselves may require.

(6) **Updating Records.** The contracting agency also should inform the service bureau of any need to periodically update, amend, or make changes in any record group. With this information, the contractor can build into a proposal terms for any updating which may be necessary at a subsequent time.

(7) Work Space. If filming is to be done on site (i.e., on the premises of the contracting agency), the service bureau will need information relative to work space. This should include a schedule of hours when work can proceed, as well as details involving such things as plumbing, electrical outlets, voltage, etc., as may be appropriate.

(8) Delivery Requirements. Lastly, the contracting agency should make clear what its requirements are for delivery of the completed film. Included in this category would be information such as delivery date (usually phrased in a number of working days after filming), minimum/maximum quantities in a given delivery situation, and the method of delivery. All of this should be spelled out in the final contract language.

Technical Considerations

On the basis of the foregoing preliminary data, the contracting agency will be in a better position to review the technical aspects of filming essential to the completion of a successful project. These considerations, revolving around film characteristics and the qualitative parameters of filming, are the vital parts of any microfilm program. In responding to these factors, full attention should be given to the bulletin *Public Records Regulations on Using Microfilm* (included in this *Manual*), prepared and distributed by the Division of Public Records.

Film Characteristics. Included here are the mechanical considerations which will determine, in large part, the type of output delivered by the service bureau. Indeed, on the basis of the data submitted to the service bureau, their representatives will be in a better position to offer advice on the best selections in this connection.

(1) Number of Film Copies. It will be necessary at an early point to determine how many duplicate copies of the film (in addition to the original) will be needed by the contracting agency. This will depend, to some extent, on the projected use of the film. If security and/or storage space reduction are the primary reasons for filming, it may be that the contracting agency will need only one duplicate copy in addition to the original film itself, which should be treated as the security copy. If the film is to be used for the active retrieval of records information, multiple duplicate copies will be needed, defined on the basis of how many office locations must reference the film.

In this same vein, it is also important to determine what type of film is to be used in the preparation of duplicate copies. The normal choice of film types for duplicates would be diazo, vesicular, or silver film. Realizing that there is a cost and quality difference between these film types, the contracting agency should make a careful choice on the basis of its need.

Additionally, the film polarity should be specified. Film, even in duplicates, is available in negative or positive polarity. Again, a proposal for bid should reflect a decision in this matter.

(2) Film Format. Next, a decision must be made on the format of the film. The basic decision involves roll film (reels, cassettes, cartridges) as opposed to flat film (microfiche, jacketed film, aperture cards). As before, the types of files to be filmed and the anticipated use of the finished film will guide in the choice of the film format.

(3) Film Size. The service bureau will need to know the film size requirements of the contracting agency. This includes width (16-mm, 35-mm, 105-mm) and length (usually approximately 100 feet) of roll film, or the dimensions of microfiche, film jackets, and aperture cards, in the case of flat film.

(4) Arrangement of Documents on Film. The service bureau will also need to plan on the arrangement of the document images on film. The mode of arranging images on film include simplex, duo and duplex styles. The terms refer to the positioning of the document image on the film. Many standard roll film applications will involve the simplex mode (single row of images on the film). In cases involving documents requiring two-sided filming, it may be advantageous to use the duplex format in which the two sides may be photographed simultaneously side-by-side on the film. As before, the type of records to be filmed will serve as a benchmark in determining the manner of arranging the images on film.

(5) Camera. A proposal should designate the type of camera to be used in filming (i.e., planetary, rotary, step-and-repeat). To considerable extent, the factors detailed in the preceding sections will contribute to a decision in this connection. Nonetheless, the camera type should be stipulated in the contract.

(A planetary operation consists of a camera suspended over a flat area on which the documents to be filmed are placed. The document being filmed and the film remain stationary during the exposure and are changed by the operator after the completion of each exposure. Rotary cameras film documents while the documents are being moved through the camera by a feed mechanism. The feed mechanism is synchronized with the movement of the film so that the film is exposed to each document as the document passes the camera lens. Rotary cameras allow filming to occur at a very rapid rate and are useful for records of uniform size and thickness. A step-and-repeat camera is a specialized type of camera which exposes separate images on a predetermined format basis.)

(6) Reduction Ratio. Reduction is the number of times a document image is reduced via microphotography. It is usually expressed as the ratio of the linear dimension of the original object to the linear dimension of the filmed image (e.g., 16x, 24x, 48x, etc.). Early in planning a film project, a decision will be necessary by which the reduction ratio to be employed in the filming is defined. Conventional applications have tended to settle on a reduction ratio of 24x. Higher reduction rates permit more images to be placed on a given quantity of film. Caution need be observed, however, inasmuch as higher reduction limits can impair the readability of the finished film.

(7) Targets. A variety of targets (e.g., identification targets, start/end targets, spacer targets, resolution targets, retake targets) are used in filming. Essentially, targets are eye-readable messages used to express procedural steps in the filming. A thorough understanding should be realized with a prospective contractor on the number, variety and placement of targets on the completed film.

(8) Indexing of Imaged Film. In order to facilitate the referencing of filmed records, it is important to formulate a systematic procedure for indexing the film. With roll film, indexing may fall within the following types: sequential numbering; flashing target indexing; eyeball coding; code line indexing; and blip mark indexing. Flat film may be indexed by way of notching, keypunch, color coding, column eyeball coding and title index. The type of indexing chosen will relate to the film format (i.e., roll or flat film), the type of records being filmed and the retrieval needs of the user. Service bureaus will be able to advise more closely on appropriate indexing procedures once answers to questions such as the anticipated use of the film, the volume and formatting of film are developed.

Qualitative Parameters. Included here are the most critical factors involved in the preparation of the film. Since these factors will govern, to a great extent, the durability, longevity and overall quality of the film, close attention should be given to specifying the tolerances to be followed in the filming process. Familiarity with published standards, including the aforementioned state specifications, is important.

Processing. Once exposed, film needs to be fixed and washed to hold the image and remove the residual thiosulfate. To be considered "archival," the film must be washed to reduce hypo residue (sodium thiosulfate) to within the tolerance established in the state specifications. A proposal for filming should delineate clearly the processing procedures, permissible tolerances to be achieved, and the testing medium by which those tolerances are to be measured. (See: *Public Records Regulations on Using Microfilm*.)

Filming Density. This involves the light absorbing quality of the background portion of the imaged film. Since the film image will be transmitted in viewers by way of light, the opacity of the background is of especial importance. The bulletin, *Public Records Regulations on Using Microfilm*, expresses standards for background density values. A proposal should specify acceptable background density value, as well as identify the testing procedure used to monitor the standard.

Resolution. Resolution involves the sharpness of the filmed image, usually expressed as the number of lines per millimeter which can be discerned in an image. The service bureau can identify, through a proposal, the standard resolving power of the film, as well as the monitoring techniques to control this standard throughout the filming. (See: *Public Records Regulations on Using Microfilm*).

Reports and Inspections

1. Contractor's Reports and Logs. Most microfilm production shops will have a variety of reports and logs which document the progress of any given filming job. Examples of such reports and logs are: Job Specification Sheets; Job Control Sheets; Quality Control Forms; Camera Logs; Processor Logs; and Input/Output Forms. While these forms and their entries will vary from contractor to contractor, all service bureaus will have an array of reports and logs by which they specify and record the progress of a job. To a considerable extent, these forms permit the service bureau to monitor the job and measure productivity on an internal basis. However, they also permit the identification of problems at an early point in time.

Inasmuch as this logging function serves as a quality control, the contracting agency should be knowledgeable about the procedure. In receiving proposals, the contracting agency should seek a written statement of the filming and reporting procedures to be followed in the production of film images of the desired quality.

2. Inspection. The production and maintenance of quality film requires certain inspection procedures, both during and after the act of filming. Some of these inspection procedures are an integral part of the filming process; others are the responsibility of the contracting agency. A proposal for filming must clearly specify all inspection procedures, as well as delineate the respective responsibilities of the contractor and the contracting agency.

Generally, the contractor's responsibility involves the inspection of all processed films. The frame-by-frame inspection is designed to determine the clarity of detail, resolution and capability of reproduction of the finished film. The inspection also verifies the image sequence on the film, as well as the location of finding aides and indexes. Any film defects will be identified, corrected, and documented at this point. It is important that a proposal for filming include a firm description of the service bureau's processed film inspection program. Moreover, the contractor's willingness to make available to the contracting agency the records of the processed film inspection program, as the need arises, should be ascertained.

Equipment

The success of any microfilm project depends, to some degree, on the selection of equipment consistent with the type of film produced and the anticipated use of that film. A key factor in the choice of microfilm equipment involves compatibility. For example, readers or reader-printers must be compatible with the type of film being produced. Whether or not the service bureau with which a contact is formed vends equipment, the service bureau will be able to offer critical advice on the basic criteria to be considered in achieving systems compatibility.

GLOSSARY

Aperture Cards — Punched (tabulating) cards with windows containing microfilm frames. While there are several formats, including cards with multiple apertures and cards containing jacket-like envelopes over multiple apertures, the one most commonly used is the so-called MIL-D aperture card. This card has an aperture of 2 by 1-3/8 inches specifically located in one end of the card as a carrier for a frame of 35-mm film. These cards are widely used for engineering drawings and design support documents. The remainder of the card is normally used to record the document identity in key-punch code which is interpreted (printed) at the top of the card.

Archival Quality — The ability of processed microfilm* to retain its characteristics and resist deterioration for a lengthy period of time (e.g., normally over 100 years).

Binary Encoding — An optically readable pattern of clear and opaque rectangles encoded onto the microfilm during filming. This indexing technique allows random access retrieval of one or more images on a roll of film.

Blowback — The enlargement of a microfilm image to viewing size.

Cartridge — A single core container enclosing roll film,* designed to be inserted into microfilm viewing devices.

Cassette — A double core container enclosing roll film designed to be inserted into microfilm viewing devices.

Computer Assisted Retrieval Station — A desktop automated file and display device for up to 73,500 documents filed on microfiche. Keyboards matched to standard 4x6 inch microfiche formats are available and keyboards matched to various file organizations have been designed.

(Within the unit, up to 750 microfiche are filed in a horizontal rotary wheel. Each microfiche is uniquely identified in a binary code in a metal strip affixed to the edge of the fiche in the microfilm conversion process. Entry of the required fiche identity into the keyboard actuates the mechanism that selects the desired microfiche and places it in the optical system in the unit. In many applications, an index page is first displayed. From it, the operator selects and keys the grid* location of the desired image.)*

Computer Output Microfilm (COM) — Microfilm containing data produced by a recorder from computer generated electrical signals.

Computer Output Microfilmer (COM) — A recorder which converts data from a computer into human-readable language and records it on microfilm.

Computer Output Microfilming (COM) — A method of converting data from a computer into human-readable language onto microfilm.

(COM units generate both roll film and microfiche. Depending on the unit, the microfiche reduction ratio [the number of times a document is reduced via microphotography] can vary from 20:1 to 48:1 [equivalent reduction ratio, because there is no original hard copy* document for comparison]. Although most new COM generated microfilm will be produced at 48:1, the user may encounter microfiche that have been produced at 42:1 and lower reduction ratios. Conventional applications have tended to settle on a reduction ratio of 24x. Higher reduction ratios permit more images to be placed on a given quantity of film. Caution need be observed, however, since higher reduction limits can impair the readability of the finished film.*

*This glossary.

Readers and reader-printers are available in a variety of forms to suit the environment in which they will be used, the user's need, the system and cost. The basic forms are:

- a. LAP READERS — These units are designed for portability and personal use, they are available at present only as microfiche readers. Small hand-held readers are sometimes used by persons who have a need for occasional look-ups only. These units are adaptable for use at locations away from the office and some are battery operated or can be plugged into automobile electrical systems.*
- b. PORTABLE READERS — These are readers that either fold into a case similar to a portable typewriter case or are compact and portable. They are now available for most types of microforms and are being increasingly used for general reference work.*
- c. DESK READERS & READER-PRINTERS — These units are intended for continuous use and are placed on a desk, table, or stand.*
- d. FREE-STANDING UNITS — These self-contained readers and reader-printers have integral bases and are designed to stand alone. Many manufacturers offer a list of accessories as well, such as floor stand, combination stands and microform storage units, adaptors for other types of microfilm, and others. The number of operating features, controls and accessories on any unit is directly related to its cost. As a minimum, nearly every reader has an on-off switch and a control for focusing. All reader-printers have some means of controlling print time.*

Continuous Forms Microfilmer — Utilizes a method of printing in which the roll film being copied and a roll of paper or film are synchronized to move at a related speed over the printing aperture.

Densitometer — A device used to measure the optical density of a microfilm image or film base by measuring the amount of incident light* reflected back or transmitted through the microfilm. It provides a microfilm system with the quickest and simplest controls that: 1) maintain quality; 2) meet specifications; 3) reduce waste; 4) speed turn-around. When silver masters are intended for archival storage, a chemical test is usually performed to verify that the film has been washed adequately, and that there are not excessive levels of processing chemicals left on the film. This residual thiosulfate test can be performed using a diffuse densitometer with an ultraviolet filter.

Density — The degree of lightness or darkness of the film image and a measure of whether the film is over-exposed or under-exposed. Proper density is required to produce readable microfilm which is capable of producing film duplicates and hard copy reproductions.

Diazo Films — Films that are sensitive to ultraviolet and near-ultraviolet energy and can be handled in yellow or subdued light. The exposed copy film is developed either by placing the film under pressure of ammonia briefly or passing it through a chamber of warm ammonia vapor. Diazo films do not reverse the image mode and copy negative images as negative images, and positive images as positive images. A reversing diazo film has been introduced for use as a reproduction intermediate.

(Because the processing of silver halide film is relatively slow and expensive, alternate films were developed to cut processing time and duplication costs. Diazo is one of these new types of film. Production of duplicate film on diazo is relatively rapid and inexpensive. Advantages of diazo film include: 1) low film stock cost; 2) simple, fast, inexpensive processing — darkroom not needed; 3) resistant to scratching. Disadvantages include: 1) low light sensitivity; 2) requires special venting for processing; 3) needs a more intense power source for filming than silver halide; 4) does not meet archival standards.)

Film Jacket — A transparent plastic carrier with a single or multiple sleeve or pocket made to hold microfilm in flat strips. A duplicate film-to-film copy reproduced from a microfiche master, a microfiche copy or a film jacket may also be called a microfiche. Any current standard microfiche reader will also accept a microfilm jacket of the same physical size and general format.

Grid — A defined array of horizontal and vertical lines which divide an area into uniform spaces called frames. The grid defines the arrangement of the rows and columns of microimages.*

Hard Copy — A paper copy of the enlarged microfilm image.

Heading — Inscription placed at the top of the microfiche to identify its contents. It is readable without magnification.

Incident Light — The light which strikes an object distinguished from the light absorbed by it, reflected from it, or transmitted by the object.

Microfiche — A sheet of microfilm containing multiple microimages in a grid pattern. It usually contains a heading which can be read without magnification. The 105-mm by 148-mm size microfiche is the most widely used in the United States, as well as internationally. While this size microfiche is often called 4x6 inches in the United States, these dimensions are not strictly accurate.

Microfiche Reader — One of the simplest types of microfilm readers in current use, and accordingly, it is generally less expensive than a comparable roll film reader. Most microfiche readers are intended for desk use.

Microfilm — A fine grain, high resolution film containing an image greatly reduced in size from the original.

Microform — A generic term designating the whole range of microimages* which can be duplicated. Microforms may be differentiated into two basic formats: unitized media and roll film. Roll film takes the form of reels, cassettes* or cartridges.* The unitized format involves flat film (i.e., microfiche, film jackets, aperture cards). A considerable number of retrieval devices, readers and reader-printers are available for each type. To the user's advantage, much of the equipment will handle one or more classes of microforms. While this makes classification of microform retrieval equipment a little difficult, a prospective user should realize that there are few, if any, truly universal reference devices.

Microform Retrieval Equipment — Any device used to locate, enlarge and display microform images or that produces enlarged hard copy* from the images. The microforms most widely used in the United States are: 1) conventional roll film, 16-mm and 35-mm, stored and handled on standard reels; 2) roll film stored in cassettes or cartridges to facilitate handling and retrieval; 3) multiple image formats (microfiche, jackets, and jacket-punched card hybrids); 4) aperture cards.

Microimage — A unit of information, such as a page of text or a drawing, too small to be read without magnification.

Planetary Camera — A camera suspended over a flat area (bed) on which the documents to be filmed are placed. The document and the film remain stationary during the exposure and are changed by the operator after the completion of each exposure.

Rewind — A support and a device consisting of a spindle geared to crank (or clutch) used in pairs to wind film from one reel to another.

Roll Film — A long piece of flexible film which is wound on a reel, spool or core.

Rotary Camera — Films documents while the documents are being moved through the camera by a feed mechanism. The feed mechanism is synchronized with the movement of the film so that the film is exposed to each document as the document passes the camera lens. Rotary cameras allow filming to occur at a very rapid rate and are useful for records of uniform size and thickness.

Silver Halide Copy Films — Like camera films, are sensitive to visible light, but the emulsions are balanced for optimum film-to-film copying. Most of the silver halide copy films reverse the image mode when processed, producing a positive copy from a negative master or a negative copy from a positive master. A direct duplicating film is available that produces negative from negative and positive from positive images. Silver halide is the only film suitable for duplication when archival quality* film is required. Advantages of silver halide include: 1) high sensitivity to light; 2) good tonal quality; 3) excellent recording density; 4) long shelf life; 5) meets all archival requirements. Disadvantages include: 1) not available for immediate viewing after exposure; 2) requires a darkroom and expensive chemicals for processing; 3) is easily scratched; 4) requires well-trained personnel for proper processing; 5) requires slow processing since film must be duplicated and then processed.

Sixteen Millimeter (16-mm) Format — Film 16-mm wide is used for business records, catalogs, and letter-size documents. The film may vary in thickness, however, and therefore a standard reel will accommodate from 100 feet of standard base film (5 mils thick) to over 200 feet of thin base film. Depending upon the reduction ratio used, 100 feet of film may contain images of 2,000 to 3,000 letter-size documents; 200 feet, from 4,000 to 6,000 pages.

Step-and-Repeat Camera — A specialized type of camera which exposes separate images on a predetermined format, usually in rows and columns. Once exposed, film needs to be fixed and washed to hold the image and remove the residual thiosulfate. To be considered archival quality* the film must be washed to reduce the hypo residue (sodium thiosulfate) to within the tolerance established in the stated specification.

(The production and maintenance of quality film requires certain inspection procedures, both during and after the act of filming. Frame-by-frame inspection is designed to determine the clarity of detail, resolution and capability of reproduction of the finished film. The inspection also verifies the image sequence on the film as well as the location of finding aids and indexes. Any film defects will be identified, corrected and documented at this point. There are devices available that display images on a screen for production and quality control purposes. These include film editors and jacket-reader fillers. Film editors are used to inspect microfilm as a part of quality control procedures or during a film-splicing program. The units available vary in complexity. Some are available as complete work stations, including splicers, rewind units, microscopes, cartridge loaders and viewers. Film editors or verifiers are also available for aperture cards. Some of the units mount film in aperture cards, as well. Jacket-reader fillers are used to cut and insert film strips into microfilm jackets. Images are verified by means of a screen which is part of the filler.)

Thirty-Five Millimeter (35-mm) Formats — Archivists and librarians have been using 35-mm roll microfilm for many years to preserve and distribute important historical documents, books, magazines and newspapers. A reduction typically used is 14:1. Some oversized items, such as newspapers, are more often filmed at 16:1 to 20:1 reductions.

Vesicular Films — Primarily ultraviolet-sensitive and are developed thermally. Vesicular film reverses the image mode. This is the other alternative to silver halide. Vesicular differs from both silver halide and diazo in that it is based on a light-scattering principle rather than on light absorption. Because of this, it can be rapidly exposed and processed at low cost. Like diazo, vesicular film is presently available only for duplicate film. Advantages of vesicular film include: 1) high-speed, relatively simple processing, with no chemicals needed; 2) particularly adaptable to COM* output; 3) available in reversal and non-reversal forms. Disadvantages of vesicular film include: 1) low sensitivity to light; 2) available only for duplication; 3) does not meet archival standards.

*This glossary.

Security



SUPERVISOR OF PUBLIC RECORDS
Municipal Records Management Manual

SECURITY

A. SAFETY OF RECORDS

Imagine trying to fulfill your duties without records. Imagine trying to replace those records, compiling them from other sources or perhaps starting from scratch. But how can the heritage of a community be replicated or replaced? What about the rights of individuals, such as municipal employees? How can their retirement rights be protected if earnings records are lost?

And the loss of vital operating records would dramatically affect a municipality's daily business and jeopardize the public interest.

By some estimates, the cost to a municipality of a loss of its records in a fire could be \$200-700 per capita. For a municipality of, say, 10,000, this represents a \$2-7 million loss. The cost of building a modern vault in compliance with the Specifications for Safes and Vaults is some \$20-\$60 thousand, or about 1% of this amount. Municipal records are not insurable, and because they warrant the best protection available, the costs of providing proper safes and vaults should be regarded as insurance. The significance of proper vaults simply cannot be overemphasized. Suffice it to say that in the private sector, of all corporations suffering a severe loss of records, 42% go out of business in an average period of 9.5 days.

When a community loses its records to fire, theft, flood or deterioration, it becomes impossible to carry on municipal business. Records may be replaced only after considerable delay, if at all. Underscoring the importance of fire-resistive storage is the alarming statistic that since 1970 there has been nearly one fire per year in a city or town hall in Massachusetts. In addition, a number of other municipal buildings have been burglarized or vandalized. Secure facilities for the protection of records should therefore be recognized for their crucial significance.

The obligation of municipalities to provide for the protection of their records is described in M.G.L.A. c. 66, s. 11 and 12. Section 11 explicitly charges cities and towns with responsibility for providing fireproof equipment for records:

City Councils and Selectmen shall at the expense of the city or town, provide and maintain fireproof rooms, safes or vaults for the safekeeping of the records of their city or town... and shall furnish

such rooms with fittings of non-combustible materials only.

Section 12 reiterates the obligation to provide safe, fire resistive storage for city and town records:

All such records shall be kept in the rooms where they are ordinarily used, and so arranged that they may be conveniently examined and referred to. When not in use, they shall be kept in the fireproof rooms, vaults or safes provided for them.

The Attorney General's Opinion (8 Op. Atty Gen. 1929, p.594) based on M.G.L.A. c. 66, s. 1 and 11 also supports the authority of the Supervisor of Public Records to establish the specifications for such safes and vaults. (See the "Specifications for Safes and Vaults for the Safeguarding of Public Records" issued by the Supervisor of Public Records and approved by the Massachusetts Secretary of State, Appendix.)

In order to make the most efficient use of available resources for records storage, records should be prioritized according to their significance. It is prudent policy, therefore, to inventory records so that types, volume, rates of accumulation and class of importance may be determined. The following classifications are used by the National Fire Protection Association to appraise the value of records:

- Class I - Vital Records. These records underlie the organization of an establishment and give direct evidence of legal status, ownership, accounts receivable, and incurred obligations.
- Class II - Important Records. While not irreplaceable, these records can be reproduced from original sources only at considerable expense.
- Class III - Useful Records. The loss of these records would cause temporary inconvenience but otherwise would entail no serious disadvantages.
- Class IV - Non-essential or Obsolete Records. These records have no present value and should be destroyed (with the written approval of the Supervisor of Public Records).*

* Fire Protection Handbook (Fourteenth Edition). National Fire Protection Association, Boston, 1976.

B. FIRE PROTECTION

1. Vaults.

A vault is the only enclosure capable of providing maximum protection for a large volume of valuable records. When records must be housed in a building that could burn around them, only properly rated vaults can provide reasonable assurance of the survival of these records. In this sense, there is no such thing as a "fireproof" building. Even if the building itself does not burn, its contents will, because heat may be "walled in." Therefore, the "Specifications for Safes and Vaults" approved by the Supervisor of Public Records (see appendix to this section) requires that vaults be constructed in accordance with a six-hour fire-resistive rating, the maximum possible protection. This rating signifies the ability of the structure to resist the effects of a fire for a specific hourly time period as determined by laboratory tests. Therefore, the "Specifications for Safes and Vaults" requires certain design features contributing to fire resistance, such as structural independence, fire-resistant concrete construction, specified minimum member thicknesses and so on. Each of these and other required features serves a crucial engineering design role enabling a vault to withstand the destructive environment of a fire.

Vaults must be equipped with a door carrying an Underwriters Laboratories six-hour fire-resistive label. Sheet metal, hollow metal, and wooden doors are unsuitable for vault use as they provide inadequate fire protection and lack combination locks. In addition, the uninsulated steel vault doors installed in many city and town halls during the early twentieth century (i.e., a swinging steel door, a pair of inner steel doors, and a common frame in which they are mounted) are unsatisfactory due to their minimal fire resistance (10 to 15 minutes) and lack of an inside release lever to provide emergency escape should someone become accidentally locked inside. They also lack a relocking device essential to resist various forms of forced entry.

In addition to the "Specifications for Safes and Vaults" there are several other criteria to consider in vault construction. The volume and height of the vault should not exceed five thousand cubic feet and twelve feet, respectively. Constructing a vault within these dimensions provides easier access to records and reduces the possibility of fire originating undetected within the vault. Furthermore, the total volume of "paper fuel" and the extent of the damage of a single fire is thus limited.

2. Procedures Ensuring Vault Integrity

Common sense suggests a few rules that will ensure the integrity of the vault and its contents:

- a. The vault shall be under responsible supervision from opening until closing time.
- b. Vaults shall not be used as working space.
- c. Vault interiors shall be kept clean at all times.
- d. Smoking inside vaults shall be strictly prohibited.
- e. Electrical appliances or equipment shall not be used inside vaults.
- f. Vaults shall not be used for the storage of supplies such as stationery, blank forms and envelopes; only blank forms of a sensitive nature should be stored in a vault.
- g. All vault doors shall be locked after office hours. All vaults in hallways shall always be locked. Only vaults that are under constant supervision in office areas should be left open during office hours. All vault doors and locks shall be in good working condition.

3. Factory Built Storage Equipment

Fire-resistant safes, insulated records containers, and insulated filing devices are generally used for smaller volumes of records. They are also used where records must be kept very close to the point of use.

Equipment is classified in terms of interior temperature limit and time in hours. Two temperature limits are employed: 350 degrees F, considered the limit for paper records; and 150 degrees F, considered the limit for magnetic and photographic records (e.g., computer tapes or microfilm). The time limits employed are: 4, 3, 2, 1 and 1/2 hours. The complete rating, consisting of two elements (e.g., Class 350 (A) - 4 hours), indicates that the specified interior temperature limit is not exceeded for the given time it is exposed to a test fire. Ratings are assigned to the various categories according to the following table:

Insulated Record Containers	Class 150	4 hours
	Class 150	3 hours
	Class 150	2 hours
	Class 150	1 hour
	(Class 150 is suitable for magnetic or photographic records.)	
	Class 350 (A)	4 hours
	Class 350 (B)	2 hours
	Class 350 (C)	1 hour
Fire Resistant Safes	Class 350 (A)	4 hours
	Class 350 (B)	2 hours

	Class 350 (C)	1 hour
Insulated Filing Devices	Class 350 (D)	1 hour
	Class 350 (E)	1/2 hour
Insulated File Drawers	Class 350	1 hour

Insulated records containers and fire resistant safes are capable of withstanding: (1) a severe fire test for the time stated on the label while interior temperature does not exceed 350 degrees F during or after exposure; (2) a sudden heating without exploding; (3) a drop impact simulating a three-story fall onto hot debris. Insulated filing devices and insulated file drawers are not drop-tested but do conform to the two other specifications. Use of the first two categories (drop-tested) should be made in non-fire-resistive buildings.

Uninsulated steel cabinets provide minimal protection (less than five minutes) since heat sufficient to char contents (420 degrees F) is quickly transmitted to the interior. Ordinary metal filing cabinets fall far short of the fire resistance called for in the Specifications for Safes and Vaults and are therefore considered inappropriate for the storage of records. Such filing cabinets also offer no resistance to theft. Wooden, fiberboard, and other combustible cabinets even add to fire hazards and should also not be used for storing valuable records.

According to a National Fire Association survey, more than half of the safes currently in use provide "questionable" fire protection due to old-fashioned construction. Listed below are some of the characteristics of older safes which indicate a doubtful level of fire resistance.

1. Made prior to 1917. (In 1917 safes began to be tested for fire resistance.)
2. Does not carry an Underwriters Laboratories and/or Safe Manufacturers National Association fire-resistance label (U.L. and SMNA labels indicate the safe meets minimum standards. The label is usually located on the door or the door jamb.)
3. Door and body jams have step construction. (Old type construction features a series of steps. This allows heat to funnel in.)
4. Has heavy iron shell or cast iron door and body jams. (Iron quickly conducts heat to the interior; cast iron can shatter on impact.)
5. Has a steel inner door. (Old type construction.)

6. Has shelves, drawers, etc., made of wood. (Old construction.)
7. Has carpeting on floor. (Old construction.)
8. Has ornate door decoration. (Gold leaf, painted scrolls, etc., usually indicate a safe was made at the turn of the century.)

These "old line" or iron safes do not adequately protect their contents due to their inability to withstand stresses and strains. They often fail to resist the impact caused by falling one or more floors as a result of building collapse, and their fire resistance is uncertain. It is obviously poor practice to rely on any safe of unknown or uncertain resistance to fire or impact for the protection of valuable records. Hence, the Specifications for Safes and Vaults require that safes carry Class "A" (four-hour) ratings, the maximum fire protection available in factory-built equipment. (The publication, Specifications for Safes and Vaults, follows as an appendix to this section. Additional copies will be supplied on request.) Fireproof cabinets and Class "B" and "C" safes, however, are acceptable for current records which must temporarily be held in immediate office areas.

C. BURGLARY, THEFT AND VANDALISM PROTECTION

While the Specifications for Safes and Vaults are designed primarily to protect records against fire, it should be noted that "six-hour" reinforced concrete vaults and vault doors also provide a degree of burglar resistance (a six-hour door qualifies for Class B Mercantile Burglary Insurance). Nevertheless, as an added precaution, auxiliary burglar alarm systems on vaults housing a municipality's most important records are strongly recommended. Since burglaries are likely to occur during non-working hours, emphasis must necessarily be placed on equipment and devices (i.e., properly constructed vaults, safes, burglar alarms) to protect records.

On the other hand, reducing the threats of theft and defacement of records depends to a degree on building architecture and personnel. Records which are more likely to be stolen or vandalized are those which are being used daily in the course of business. In order to prevent this, buildings can be designed so that the number of entrances and exits in records research areas are limited. This would facilitate the monitoring of records users by office staff and decrease the chances of records being removed surreptitiously. Additional steps which may be taken to safeguard frequently used records are:

1. Limiting the areas where records may be researched;

2. Limiting the amount of material a person may use at one time;
3. Checking the material before and after it is used;
4. Prohibiting the use of pens or indelible markers while using records;
5. Prohibiting smoking or eating while using records;
6. Using microfilm copies rather than original documents whenever possible;
7. Additional general security provisions: strictly limiting access to all vaults to authorized personnel only; in-house rules regarding exactly which staff members should have the combinations to specific vaults; periodic changing of the combination numbers on locks for added security (annually or semi-annually).

It should also be noted that an inventory of all records would greatly assist in determining the extent of record-holdings prior to their use by researchers.

D. NEW VAULT ANNEXES; STOREROOMS, ATTICS

Many city and town halls are old in construction and contain more records than can be safely maintained in them. As a result, in many such buildings large-volumes of public records are "dumped" into attics and other non-fire-resistant storerooms. This represents a most serious threat to the security of a municipality's records and calls for action by municipal officials having custody over public records. Where the total volume of records exceeds the total volume of acceptable vault space, the following steps should be taken:

1. The total volume of non-obsolete public records of the municipality should be identified. The cubic footage should be estimated.
2. The total volume of available vault space, in cubic feet, should be determined. (The volume of a vault is its interior length multiplied by its width and height.)
3. The Office of the Secretary of State should be contacted for assistance in determining which existing vaults are acceptable. A free evaluation should be requested, thus enabling the municipality to determine which existing vaults are up to standard, which ones lend themselves to upgrading work, and which ones are unacceptable.

4. The volume of additional vault space that should be provided is determined from the total volume of records and the total volume of usable vaults as determined above.
5. The obsolete portion of existing records should be destroyed upon written authorization from the Supervisor of Public Records.
6. In order to reduce the total volume of non-obsolete records (and hence the total volume of vault space needed) a microfilming project should be considered. Many records can be discarded after microfilming and full advantage of this option should be taken in order to minimize the municipality's vault space needs.
7. If a new vault space is needed, consideration should be given to the concept of a vault annex, a one- or two-level vault built as a small annex to the building. A vault annex is the ideal vault because it will not be directly under the weight of the building should a building collapse occur in a fire; it will be structurally independent; it will be more easily designed and constructed than a vault in the interior of the building; and it will not use up badly needed office space in an crowded municipal building. Environmental conditions may be more difficult to control, however, so care should be taken to provide adequate climate control systems.
8. Once the decision to construct new vault space and/or to upgrade existing vaults is taken, the name and address of the designated project architect/engineer must be furnished to this Office for further consultations between this Office and the architect/engineer. Finalized stamped project drawings and specifications must be forwarded to this Office for review of their compliance with the Specifications for Safes and Vaults well before construction begins, thus allowing time for any revisions to the design drawings that may be necessary.

E. DISASTER PREPAREDNESS

Implementation of secure storage and appropriate handling procedures is the most effective step that records custodians can take to protect records; some losses, however, cannot be prevented. In the case of disaster, being prepared to take appropriate action may minimize these unavoidable losses.

Municipal officers should consider the impact of a loss of records upon their cities or towns and inspect their records

storage facilities to determine what hazards may exist. In consultation with their insurers, fire departments and the Records Management Unit, municipal officers can develop a program to reduce or eliminate many of the risks. Elements of such a risk management program might include installation of fire suppressant systems to protect the structure, acquisition or construction of fire resistant enclosures to protect the records themselves, and the microform duplication and remote storage of the records.

Officers should also consider ways in which lost records can be reconstituted. Can surviving records of one office be used to reconstruct the lost records of another? Is similar information being held by other entities such as state or county agencies or regional authorities? Officers may also wish to consider insuring the town against the costs of reconstituting destroyed records and recreating lost information.

Municipal officials should be prepared to move quickly to mitigate the damage caused by unforeseen events through retrieval and conservation efforts. In preparing a strategy for responding to a disaster, there are two crucial elements. The first is an accurate inventory of the records being housed in the building. The inventory should identify the records, assign relative values for retrieval and restoration, and identify their locations within the building. After a disaster, vital records can be located relatively quickly by using the inventory in conjunction with a floor plan and the disaster contingency plan (Attachment A).

This written disaster contingency plan is a second crucial element. Copies of the plan should be lodged with the local police and fire departments, and other locations outside town hall. When a disaster strikes, it is essential to begin recovery procedures as quickly as possible. However, no salvage activities can take place until an overall plan has been established. A written contingency plan, prepared in advance, will permit recovery to begin immediately.

Many necessary materials may be already on hand, but it may sometimes be necessary to enlist outside resources, depending upon the severity of the disaster. These resources should be identified in advance and potential suppliers be notified that, should the need arise, their aid may be requested.

While the situation of each municipality and the exigencies of each disaster will be different, the disaster information sheet (Attachment B) should provide the information necessary to move quickly and effectively to minimize the damage.

The following guidelines should be useful in commencing conservation activities after a disaster has occurred.

1. Procedures

After an incident has occurred and it is safe to enter the area, assess the extent of the damage with the aid of the inventory and floor plan. Determine the type of damage done to the storage area and records, and the value of the records damaged. This basic assessment will help the municipality evaluate the seriousness of the disaster and the appropriate course of action.

In the event of a disaster, the following steps should be taken:

1. the official responsible for the repository should conduct a preliminary survey of the scene of the disaster and report to the Supervisor of Public Records as best as can be ascertained;
 - a. the nature of the disaster,
 - b. the extent of the damage to the repository,
 - c. the type of records involved,
 - d. the type and extent of damage to the records,
 - e. the volume of records affected by the disaster, damaged and otherwise;
2. after consultation, the Supervisor of Public Records may determine that direct state assistance is necessary. In this case, a member of the Records Management Unit will be sent to the scene of the disaster. If no direct state assistance is deemed necessary, the official responsible for the repository should begin to implement the contingency plan and conduct a complete survey at the earliest possible moment and report his findings to the Supervisor;
3. the member of the Records Management Unit sent to the scene will conduct a survey of the damage to the repository and its holdings and act as liaison between the official responsible for the repository and the Supervisor of Public Records. The Unit member will work with the official and provide assistance and support for salvage and conservation efforts.

2. Fire Damage

In a rapidly controlled blaze, fire damage may be more apparent than real. Records inside damaged boxes may still be in good condition.

Intense heat causes embrittlement of paper, even if the paper itself is not burned. Records that have inherent value, where a copy will not retain the same value as the original, should be examined by a conservator.

Where important records are badly charred, do not try to open bundles. They should be wrapped and brought to the conservator.

Where short-term records are embrittled or slightly damaged by fire, they may be photocopied; long-term records may be microfilmed.

3. Water Damage

Initial salvage procedures will depend largely on the weather. The object is to avoid the stagnant pockets of moist air that encourage mold growth; air must be kept moving, and humidity must be kept under control.

In all cases, electric fans should be used to keep air moving. If the weather is dry, windows may be opened; if not, windows should remain closed and a dehumidifier should be used. In case of a water-related disaster in the winter, it is wise to turn off the heat; in the summer, air conditioning should be used if available.

Quantities of absorbent materials, such as paper towels or unprinted newsprint, will be needed. Work surfaces should be covered with plastic.

Damp materials should be removed carefully from boxes or storage equipment and spread out on flat surfaces to dry. Large, clean window screens (of the plastic or fiberglass varieties only) may be propped a few inches off the table or floor to allow maximum circulation. Plastic or fiberglass screening may be purchased in bulk rolls from hardware stores.

Very wet materials are fragile and difficult to separate; these materials should not be moved. A conservator or Records Management Unit member can be called in for consultation as necessary.

4. Volumes and Pamphlets

Bound materials that can stand upright should be fanned open in the direct flow of air from a fan. Very wet volumes should be stood upright on absorbent paper which is changed as it becomes wet. If the pages stick together as the volume dries, absorbent paper can be interleaved every two to six pages.

Clay-coated pages (indicated by a glossy finish) must be interleaved every page if the volume is to be air dried. Any page that is not interleaved will fuse with the facing page.

Pamphlets and paperbound materials may be hung, spine up and lengthwise, on a clothesline, with the cord running through the center of the book. Thick pamphlets can be hung with two or more parallel cords running through them.

5. Mold

Dry moldy materials as quickly as possible. Do not attempt to wipe mold or mildew from wet materials, as the residue will be rubbed into the paper. As soon as the drying is complete,

materials should be evaluated for fumigation. Once dry, mildew and mold residue can be treated similarly to other forms of surface dirt and can be brushed or vacuumed off.

6. Nontextual Materials

Microfilm, movies, slides, negatives, and other film base materials should be immersed in water in plastic bags, and the bags themselves placed in a plastic (not metal) garbage can of cold water. Materials must remain wet until they can be dried with professional equipment. Placing items in plastic bags keeps materials readily retrievable and identifiable.

Little is known about the effects of fire and water damage on magnetic media. Ideally, magnetic media are duplicated and back up copies held off-site. In situations where original machine readable records are damaged, the vendor or service bureau should be contacted immediately. They may suggest professional cleaning and drying, or freeze-drying.

7. Freezing

In all cases, if water damage is excessive and material cannot be salvaged within two or three days, damaged items should be frozen until they can be dried; freezing will stop the destructive action of the water on the paper. Materials can be held in a frozen state for up to two years without damage. Temperatures between 10° and 20° for both initial freezing and storage are preferred. Residential freezers are not adequate for freezing water-damaged records.

Plastic interlocking milk cartons and good quality freezer wrap are needed to prepare records for freezing. Volumes should be sleeved in freezer paper and packed spine down. Records should be wrapped in two-inch-thick packets and packed carefully in cartons so cartons may still be stacked. Packages and cartons must be marked to indicate the type of material, previous location and priority.

If freezer space is limited, priorities might be:

- (1) irreplaceable items which have developed mold,
- (2) irreplaceable items,
- (3) items that can only be replaced with difficulty, etc.

Frozen materials can be dried in large quantities by freeze and vacuum drying techniques, but it is expensive and requires special facilities. This means that materials may have to be shipped long distances.

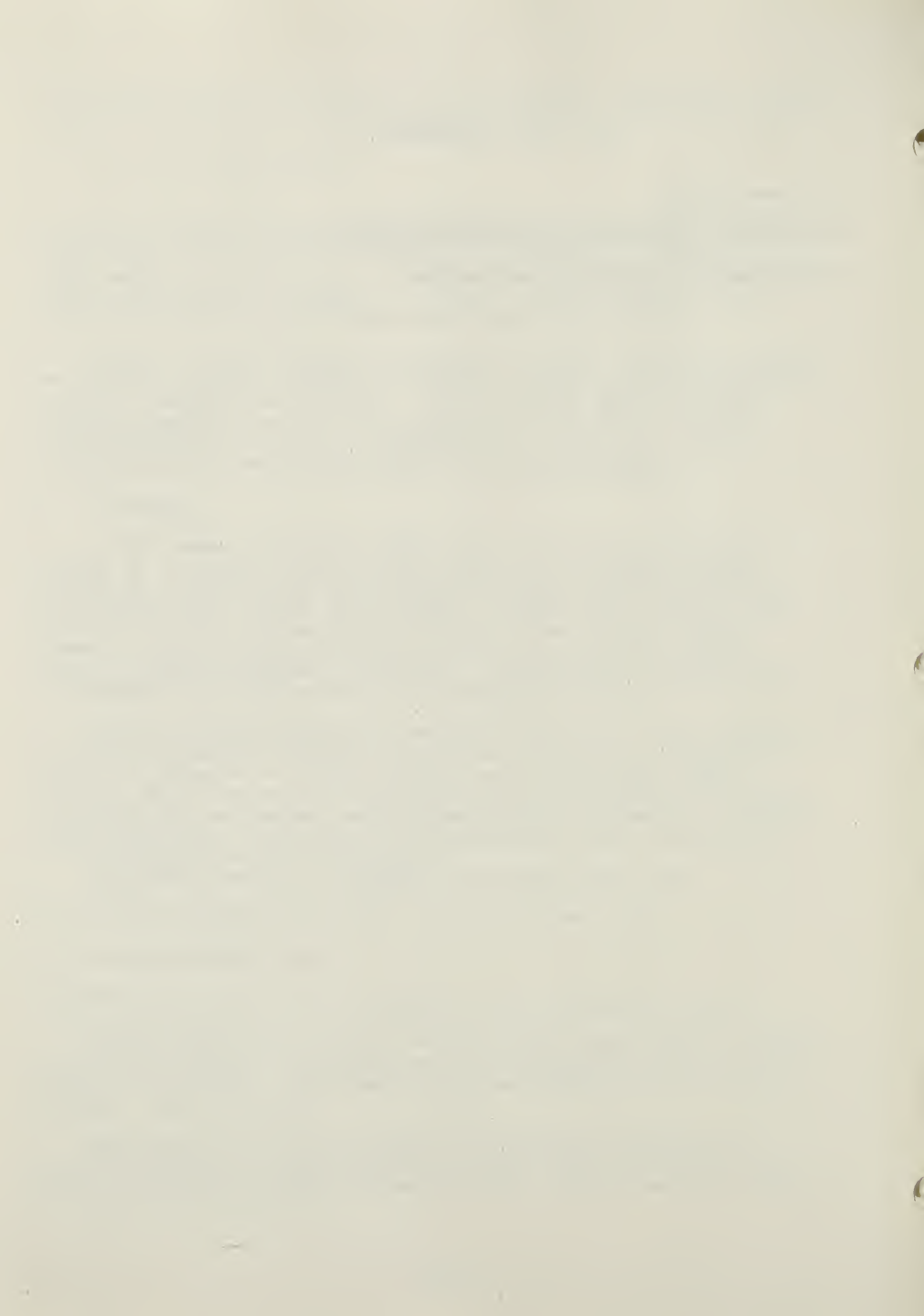
Materials to be freeze-dried can be frozen unwrapped in interlocking plastic milk cartons packed three-quarters full. Cartons should be marked to indicate the type of material and its previous location.

APPENDIX

Contingency Plan

Information Needed for Disaster Planning

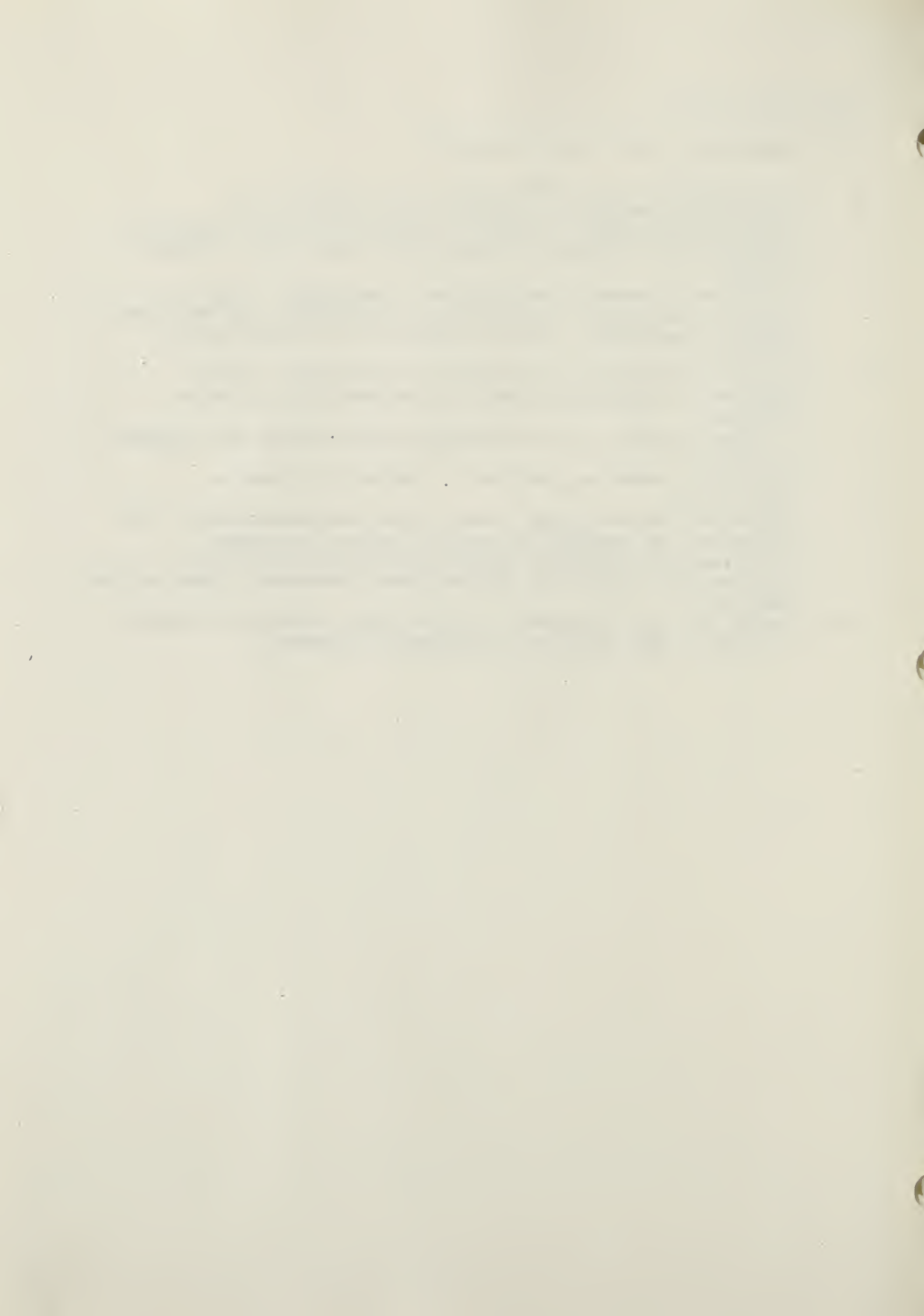
Specifications for Safes and Vaults



Contingency Plan

The contingency plan should include:

1. the location of records within the building;
2. a priority listing of records for retrieval and conservation based on the statewide retention schedules;
3. a listing of alternate storage facilities and working spaces;
4. a listing of sources of retrieval equipment (e.g., wrecking, salvage, ventilation, dewatering, and emergency lighting equipment; and of supplies for conservation efforts);
5. a listing of sources of labor for retrieval, loss assessment, cataloging and preliminary conservation efforts;
6. a tentative plan for retrieving records from the damaged structure;
7. a plan for removing records to temporary storage facilities;
8. a plan for maintaining control (and confidentiality, if necessary) of records during and after the move;
9. a listing of available conservation facilities and organizations (such as the Northeast Document Conservation Center);
10. a plan for the evacuation of the most important/valuable records in the event of a forecast disaster.



DISASTER PREPAREDNESS

Information Needed For Disaster Planning

I. Name of City or Town: _____

II. Date of completion or update of this form: _____

III. Persons to be called in case of disaster:

<u>Position</u>	<u>Name</u>	<u>Home Phone</u>	<u>Specific Responsibility in Case of Disaster</u>
City/Town Clerk	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

Person in charge of building maintenance	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

Supervisor of Public Records	_____	(Office) 727-4062	If the situation warrants the Supervisor will dispatch a conservator or Records Management Unit member to assist the Municipality.
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<u>Position</u>	<u>Name</u>	<u>Home Phone</u>	<u>Specific Responsibility in Case of Disaster</u>
In-house Disaster Recovery Team Members	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

IV. Other services possibly needed in an emergency:

<u>Service</u>	<u>Company and/or Name of Contact</u>	<u>Phone</u>
Fire Department	_____	_____
Police	_____	_____
Ambulance	_____	_____
Civil Defense	_____	_____
Conservator/Conservation Center/Disaster Assistance		
Insurance Company	_____	_____
Legal Advisor	_____	_____
Electrician	_____	_____
Plumber	_____	_____
Carpenter	_____	_____
Exterminator	_____	_____
Chemist	_____	_____
Mycologist	_____	_____
Locksmith	_____	_____
Utility Companies	_____	_____
	_____	_____
	_____	_____
Architect or Builder	_____	_____
Janitorial Service	_____	_____
Glazier	_____	_____

V. Upkeep Check list:

Date Checked

- A. Locks of doors and windows secure and keys accounted for? _____
- B. Emergency numbers posted near every telephone? _____
- C. Last inspection by local fire department official? _____
1. Fire extinguishers updated and operable? _____
2. Smoke alarms operable? _____
3. Sprinkler system operable? _____
4. Water detectors operable? _____
5. Halon system operable? _____
- D. Flashlights operable: (one in each dept., public desk and Civil Defense shelter) _____
- E. Transistor radio operable? _____
- F. Staff familiarized (by tour, not map) with location of fire extinguishers, flashlights, radio, CD shelter, and where to reach members of disaster recovery team? _____
- G. Last fire drill? _____
- H. Last Civil Defense drill _____
- I. Date of last analysis and update of insurance coverage? _____

INSERT COPIES OF LAST INVENTORY REPORT AND INSURANCE POLICIES HERE

VI. In-House Emergency Equipment:

List locations and attach floor plans with locations labeled)

A. Main Utilities:

1. Main electrical cut-off switch:
2. Main water shut-off valve:
3. Main gas shut-off:
4. Sprinkler system:

B. Nearest CB radio:

C. Fire Extinguishers:

D. Smoke Alarms:

E. Portable pump (if one on site):

F. Plastic Sheeting (stored with scissors and tape):

G. Paper towel supply (if kept on site):

H. First aid kit:

Have all members of Disaster Team toured A - H above?

Date

VII. Off-site Emergency Equipment and Supplies:

<u>Item</u>	<u>Supplier</u>	<u>Phone Number</u>
Library Trucks	_____	_____
Drying Space	_____	_____
Refrigerator trucks	_____	_____
Deep freeze facilities	_____	_____
Dehumidifiers	_____	_____
Plastic crates such as used to transport milk cartons	_____	_____
Portable electric sump pump	_____	_____
Heavy duty extention cords	_____	_____
Rolls of plastic sheeting	_____	_____
Electric Fans	_____	_____
Extra security personnel	_____	_____
Thymol crystals and denatured alcohol	_____	_____
Unprinted newsprint	_____	_____
Dry ice	_____	_____
Freezer or wax paper	_____	_____
Plastic trash bags	_____	_____
Paper towels	_____	_____
Water hoses	_____	_____
Sponges, mops, pails	_____	_____
Brooms	_____	_____
Rubber Gloves	_____	_____





The Commonwealth of Massachusetts

Office of the Secretary of State
State House, Boston, MA 02133 (617) 727-2800

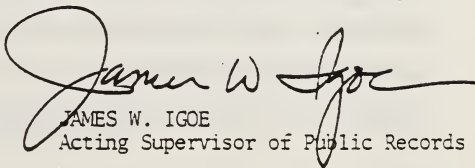
Michael Joseph Connolly, Secretary

SPECIFICATIONS FOR SAFES AND VAULTS

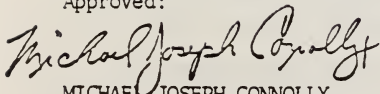
for the

SAFEGUARDING OF PUBLIC RECORDS

The following are the specifications for the construction of safes and vaults for the safeguarding of Public Records, as authorized by General Laws, Tercentenary Edition, Chapter 66, section 11, and the Attorney General's opinion.


JAMES W. IGOE
Acting Supervisor of Public Records

Approved:



MICHAEL JOSEPH CONNOLLY
Secretary of State

THE COMMONWEALTH OF MASSACHUSETTS

Office of the Secretary

DIVISION OF PUBLIC RECORDS

SPECIFICATIONS FOR SAFES AND VAULTS
FOR THE SAFEGUARDING OF PUBLIC RECORDS

SAFES

Safes shall bear the Underwriters' Laboratories "A" Label approval.

VAULTS

Doors

All vault doors shall carry a fire-resistance rating of six hours and shall not exceed two for any one vault.

Locks

Locks shall be of the combination type with an Underwriters' Laboratories approved relocking device designed to hold the door in case of mechanical, explosive or torch attack on lock. Door should be equipped with inside escape mechanism.

Walls

A. Materials: Wall shall be built solid of reinforced concrete, or brick well bedded in mortar, or of protected steel or reinforced concrete framework with panels of reinforced concrete, plain concrete or brick. Stone and gravel aggregates for concrete shall be selected with regard to their fire-resistive properties. Siliceous gravel shall not be used for the coarse aggregate, unless adequately reinforced against spalling as by wire mesh near the surface, as this material is particularly subject to disintegration under heat. There

shall be a covering of at least 2 inches of concrete over all reinforcement.

NOTE: The concrete and reinforcement shall comply with the recommendations of the current report of the Joint Committee on Concrete and Reinforced Concrete. Brick shall conform to the current standards for building brick of the American Society for Testing Materials.

Where a structural steel framework is used, the steel shall be protected with at least 4 inches of concrete, brick, or its equivalent tied with steel ties or wire mesh equivalent to No. 7 (A.S.W. gage, 0.177 inch diameter) wire on 8 inch pitch. Brick protection, if used, shall be filled solidly to the steel with concrete. At the joints between columns, beams and panels, the panels shall be well bonded to the columns by notching or rabbeting into the concrete to a depth and width of at least 1 inch. Temperature reinforcement for concrete shall consist of steel rods at least 1/2 inch in diameter spaced 4 inches on center and running at right angles in both directions. Rods shall be securely wired at intersections not over 12 inches apart in both directions and be installed centrally in each panel wall. Any equivalent form of temperature reinforcement may be used.

B. Thickness: Walls shall be unpierced except for doors and air conditioning as provided below, and shall be at least of the thickness specified in the following table.

Minimum Wall Thicknesses - Ground Supported Vaults

KIND OF WALL CONSTRUCTION

Number Of Stories Counting From Top Down	Protected Steel or Reinforced Concrete Frame			
	Reinforced Concrete	Brick or Plain Concrete	Reinforced Concrete Panels	Brick or Plain Concrete Panels
Top	10	12	10	12
2nd	10	12	10	12
3rd	10	12	10	12
4th	12	16	10	12
5th	12	16	12	16
6th	12	20	12	16
7th			12	16
8th			12	16
9th			12	16
10th			14	16

Variations depend on the materials used, the type of building construction, and the number of stories. However, in the lower story of buildings over two stories in height, the minimum thickness shall in no case be less than 12 inches for reinforced concrete nor 16 inches for brick. These minimum thicknesses apply to the vault construction only.

C. Independence: Vault walls shall be structurally independent of the building whenever possible. If connected in any manner, the connection shall be so made that in event of the collapse of the building, the building members may move or fall without affecting the stability of fire-resistive qualities of the vault.

In fire-resistive construction provision shall be made for expansion of the interior building members, as otherwise severe thrusts may

be exerted on the vault structure.

NOTE: Under moderately severe conditions of heating an expansion in the concrete or steel equivalent to 1/16 inch per foot is possible.

Where building members join those of the vault they shall project into the vault not more than 4 inches, and in no case shall the wall thickness be less than 8 inches at these points. All beams or bearing members adjoining the vault shall be designed to release freely in case of failure. Where the outside walls of a building are used to serve as a portion of the vault walls, the latter shall be effectively bonded to the building walls.

NOTE: Attention is called to the fact that the method of building a vault wall against the outer wall of building, and omitting bonding, will not insure the integrity of the vault, and that vault walls erected after the building are likely to settle and break connections with building walls. Also, falling building walls may tear away wall used jointly for building and vaults, and cause failure of vault.

Roof

A. Materials: Roof construction shall be of reinforced concrete or protected structural steel with reinforced concrete slabs or fillers of adequate strength and fire resistance.

B. Thickness: Roof shall be unpierced and shall be at least 8 inches in thickness. Greater thickness may be necessary to provide strength for loads and impacts as specified below.

C. Independence: Vault roofs shall be entirely independent of floors, roofs, or ceilings of buildings. Vaults should preferably be

built to extend to the top floor of the building, and the top of the vault located as close to the underside of the building roof as possible.

D. Bonding: The roof and walls of the vault shall be thoroughly bonded together. If construction is of reinforced concrete throughout, the reinforcing steel in the roof shall be carried into the walls and the wall reinforcement into the roof. If there are steel beams in the roof, these shall be securely fastened to structural members imbedded in the walls. If walls are of brick, suitable anchors shall be provided.

E. Provision Against Impact: Where the roof is more than 12 inches below the roof of the building, the vault walls should be parapeted at least 12 inches above the vault roof, and the space thus formed filled with sand, gypsum or similar material, to act as a cushion against accumulation of burning debris on the vault roof. Adequate drainage shall be provided for this space above the roof.

F. Design: Roof shall be designed for a live load of at least 350 lbs. per sq. ft. to take care of impact loading. Where local conditions are especially severe, such as near masonry walls or large tanks, loads of from 500 to 1000 lbs. per sq. ft. should be assumed and maximum spans in at least one direction should not exceed 10 feet.

NOTE: It is not deemed practicable to design the roof entirely to prevent possibility of damage from a heavy safe or machine falling through a considerable distance. Such equipment should be so located as not to endanger vault structures below.

G. Interior Supports: Where long spans are needed, the introduction of interior columns, girders or division walls may be necessary. All interior steel work and reinforcing shall be protected with a covering having a fire resistance classification of not less than three hours.

Floors

A. Materials and Thickness: Floors shall be of noncombustible material of a construction having a fire resistance classification not less than two hours. Floors shall be unpierced, not less than 6 inches thick, and greater if necessary to support the structure and contents of entire vault.

B. Flooring: No wood or other combustible material shall be used in the floor or surfacing.

C. Independence: Floors shall be thoroughly bonded to the vault walls and shall be independent of floors of the building.

Water Tightness

A. Walls, Roofs, and Floors: Shall be effectively water-proofed preferably using a mixture of concrete of proper grading, mixture and placing for the purpose. No combustible membrane or coating shall be employed except on a roof exposed to the weather.

B. Provision shall preferably be made to prevent entrance of water at door openings. Vault floors, or at least that part directly under the records storage area, should be approximately four inches higher than the floor of the building; if not possible, the bottoms of the lowest record storage space should be not less than 4 inches above the floor of the vault. Large drains in building floors outside of vaults are also suggested.

Environmental Control

For all new vaults constructed after January 1, 1973, air conditioning equipment shall be installed so as to maintain a constant year

round temperature of $68^{\circ} \pm 5^{\circ}$ F. and a relative humidity of $50 \pm 5\%$ on each level of the vault. Except for the required thermostats and humidistats, all such equipment shall be located outside of the vault.

Air shall be circulated through the interior by means of ducts not to exceed six inches in diameter and which contain fire dampers activated by smoke sensors. When the vault is multi-leveled a single air conditioning unit is acceptable if the ducts pierce each level through the walls and not through the floors.

Fire Protection

Any fire quenching system installed in a vault shall be of the helogenated extinguishing agent systems activated by a smoke sensing device in the ceiling of each level of the vault. Water sprinkling, foam, and chemical fire quenching systems shall not be installed in vaults used for the protection of public records.

Lighting

Flourescent lights shall not be installed or used inside vaults unless enclosed by plastic ultra-violet filters.

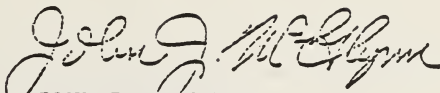
Shelving

All shelving and other filing equipment used inside the vault shall be of noncombustible construction and should be as fully enclosed as is practical.

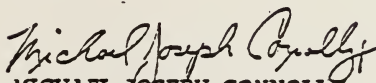
Inspection

The construction of the vault shall be under the immediate supervision of a competent engineer or architect to insure that it is built in

accordance with the above recommendations and that careful workmanship is obtained throughout.


JOHN J. MCGLYNN
Supervisor of Public Records

Approved:


MICHAEL JOSEPH CONNOLLY
Secretary of State

Conservation

Conservation

SUPERVISOR OF PUBLIC RECORDS
Municipal Records Management Manual

CONSERVATION

A. RECORDS IN AN ENVIRONMENT

While the specification of minimum standards for ink, paper and microfilm provide some assurance of the durability of records, media specifications in themselves are not sufficient to guarantee the preservation of records. Records are comprised of organic and inorganic materials and exist in variable environments and conditions which lead inevitably to progressive degradation of records. Available to the records custodian, however, is a variety of concepts and techniques of conservation by which the rate of degradation can be slowed to a minimum.

B. CAUSES AND SYMPTOMS OF DETERIORATION

The first step in developing a program of records preservation is to recognize and understand the symptoms and causes of records deterioration. The symptoms of deterioration are all too evident to most records custodians-- paper so embrittled that handling causes it to crumble; leather covers with broken hinges and leather red rot which never fails to soil the clothes of the person using the record; microfilm with faded or spotted images; and so on.

If the symptoms are evident, the causes need to be more so. Before fully understanding the causes, however, it is essential to recognize the fact that there is a constant interaction between the materials of which records are made (i.e., paper, leather, ink, film, etc.) and the environment in which they are kept (i.e., temperature, humidity, light, air quality, etc.). The chemistry of this interaction is the key to record degradation and the rate at which it occurs. A comprehensive preservation program will seek to manage each end of the equation by adequately controlling the environment and correctly treating the materials.

What may be termed as the three "h's," heat, humidity and handling, pose the greatest hazard to records. Of these, handling is the greatest danger. Improper handling leads to paper tears, broken bindings, defaced records and damaged microfilm, not to speak of the chemical impurities brought to records on the hands of the user. As can be seen, the damage which comes from improper handling is direct, immediate and gross.

More insidious and gradual in injury caused to records, but no less significant, are the elements of the physical environment - heat and humidity. High ranges of heat and humidity cause film emulsions to soften and magnetic tapes to become unstable. Combining high temperatures with high humidity leads to encouragement of the growth of micro-organisms (i.e., mold spores) and the profusion of pests (vermin, insects). This combination of heat and humidity also causes paper staining and fosters a series of adverse chemical reactions in paper and leather.

Equally serious as causes of deterioration are widely ranging fluctuations of temperature and humidity. Wild cycling of temperature and humidity puts stress on paper, bound materials and film emulsions by causing these materials to swell and contract in synchronization with the climate. The result will be broken bindings, brittle paper and unreadable film.

When you next open the records vault door and encounter an overpowering odor of mustiness, realize that it signifies the decomposition of the records based largely on the three "h's." Not only are the materials slowly rotting, but they may be providing food and nesting materials for insects, rodents and other vermin.

Another common cause of records deterioration is dirt. Dust and dirt in contact with soft records materials have an abrasive effect. While obviously soiling records, dirt also produces mechanical damage to records through abrasion.

The quality of air contributes its share to records degradation, especially in more modern times. Aside from the normal effect of oxygen and water vapor, pollutants in the air have an absolutely corrosive influence on records materials. This is especially true of gaseous pollutants, such as sulfur dioxide and carbon monoxide, released in ever-increasing quantities due to our reliance on carbon-based fuels. Combining sulfides, nitrates and other chemicals with high temperature and humidity provides an ideal condition for chemical conversions to substances such as sulfuric acid or nitric acid. The effect on paper and leather is destructive. The casualties of acid rain are counted in more than just the damage done to the natural environment.

As indicated above, records are also subject to damage from micro-organisms and vermin. Consisting of leather, paper, pastes and other organic substances, most records offer a good source of food to vermin. If not protected adequately from this hazard, records may become more than "food for thought."

While not necessarily food for vermin, records in non-textual formats (i.e., photographs, microfilm, magnetic

tapes) also face specific hazards. Film materials are subject to all the vagaries of environmental variation to which paper and leather react. Humidity problems can wreak havoc with magnetic tapes.

While not all records degrade at the same rate or in response to the same conditions, all records are subject to progressive deterioration. By being more informed about the symptoms and causes of deterioration, the records custodian can make necessary management decisions relative to preservation which will slow the rate of deterioration.

C. PRESERVATION V.S. CONSERVATION

In developing a records preservation program, the records custodian needs to examine and understand the differences between preservation, conservation and restoration. Preservation is a constant practice, involving procedures by which records are managed on a regular basis in the office, or records room where they are ordinarily housed. Preservation, as a practice, is the immediate and direct responsibility of the records custodian and his/her staff.

Conservation is the application of prescriptive practices to a particular record or group of records to ameliorate a properly diagnosed type of damage or state of deterioration. Routinely, the diagnosis, prescription and application of conservation techniques should be performed by a person with the technical competence to do so. In any event, conservation applications consist of discrete actions performed on records to correct or improve a problem or condition.

Restoration is a level of treatment beyond conservation, usually involving cosmetic improvements to restore records to either the original appearance or an appearance sympathetic to the age and nature of the records. There may be specific situations in which a particular record merits such treatment; but on the whole, the emphasis of the records custodian would be on preservation and conservation. Also, in securing the services of outside vendors, the custodian must be able to distinguish and avoid treatments which are principally to restore rather than to conserve.

There is a variety of practices available to records custodians which will have the net effect of preserving records. On the whole, these are procedures which easily can be made a routine part of office practice.

These procedures can be viewed as preventative maintenance. First, and most important, is the establishment of specific practices to govern the handling of records. Much damage occurs to records when handled improperly by clients.

Some common sense rules to avoid this danger of damage would be:

- prohibit the use of pens by office clients in proximity to the records;

- use copies of the record (i.e., microfilm, photocopy) whenever possible, instead of the original);

- avoid having the office client handle records unnecessarily (e.g., folding and unfolding original documents);

- use of archival-quality enclosures to lend additional structural support to particularly fragile records.

These and other basic rules will permit the records custodian to minimize the risk of having mechanical damage occur to records as a result of improper handling.

Maintaining proper environmental tolerances is also something the records custodian can take steps to effect. The optimal climate is one in which the temperature stands at (68) degrees F plus-or-minus 5 degrees and relative humidity at (50%) plus-or-minus 5 percent. With this in mind, the Supervisor of Public Records has mandated the installation of temperature and humidity control equipment within all records vaults constructed after January, 1975 (See: the Security chapter in this manual.)

Air conditioning equipment is the most practical means of controlling environment in vaults. Such equipment not only controls temperature and humidity, but also ventilates and filters the air, thereby removing many pollutants. In many instances, air conditioning equipment can be installed in pre-existing vaults or records rooms. In any event, air conditioning costs are more than regained in the long run, through the elimination of the need to re-bind, repair and conserve environmentally-degraded records.

Short of installing air conditioning equipment, records custodians can take specific steps to reduce damage done by an improper environment. For example, non-obsolete records should be removed from attic or basement locations where widely fluctuating temperature and humidity conditions prevail. By choosing storage locations more carefully with these thoughts in mind, the custodian can make management decisions with little cost impact on the office budget.

Effective housekeeping procedures for records areas also produce significant results at little cost. Standard cleaning practices should routinely be applied to vaults and records rooms. By keeping dust and dirt to a minimum, the adverse effects they have on records will be reduced.

The next level of intervention in a preservation program would involve simple, in-house procedures which may be performed by an informed office staff. More information on such procedures follows this section.

In contrast to the routine nature of preservation, conservation involves a prescribed treatment for the repair of an injury or defect in a record or group of records. Examples would be deacidification of acid-embrittled paper by solvent or aqueous liquids, repair of paper tears, removal of pressure-sensitive tape, encapsulation of documents and repair of broken bindings. Application of any procedure which chemically alters the record being treated is usually best left to the professional conservator.

D. TO CONSERVE OR NOT TO CONSERVE...

Indeed, no conservation treatment should be entered into lightly. Before entering into a consideration of which conservation techniques are most appropriate, the custodian should determine whether or not the records in question are worth having conserved.

Records appraisal, the art of determining the significance of a record or group of records, must be performed preliminary to any decisions about conservation. Appraisal will include, among other things, consideration of the legal and historical value of the records in question. In this context, value is more than a monetary or even an antiquarian standard; it is a judgment about the importance of the records in the context of the entire collection. Only in this way can reasoned judgments be made which will lead to prioritized conservation actions which are programmatic and not haphazard in nature (see the Disposition chapter in this manual.)

It is often the case that the significance of a document or record series rests solely on the information contained therein. In other words, it may be determined that the material has no artifactual, legal or even exhibit value and yet is scheduled as "permanently valuable" material due strictly to information it contains. The Supervisor of Public Records' policy regarding microfilm and the retention/destruction of original hard-copy municipal records will assist municipal officials in identifying which record series can be disposed of after microfilming. In general, records which can be destroyed after microfilming are good candidates for conversion to another format, rather than candidates for conservation. Failure to distinguish between a need for preserving documents and preserving information will invariably lead to unnecessary conservation treatment expenses. It is essential that consumers of conservation services become informed consumers.

Once a record or group of records is determined to be worthy and in need of conservation, determinations can be made relative to the diagnosis of the problem and settlement upon an appropriate procedure. At this point, most municipal custodians should begin to consult with a professional document conservator. To the untrained person, the protocol which appears most logical may well have a counter-productive effect. For example, the custodian would be ultimately disappointed if he/she enthusiastically encapsulates a number of documents only to find that they must be undone because they need to be deacidified. The types and sequence of conservation actions generally should be guided by a professional.

E. IN-HOUSE TREATMENTS

Procedures which may be appropriately carried out on an in-house basis may be divided into two categories, those procedures which require no instruction or training and those which may be safely undertaken after having received some instruction and training, usually in a workshop setting.

An example of an appropriate in-house procedure would be:

Rehousing materials in archival quality storage containers (folders, boxes, etc.) is an important step in the preservation of records. By removing sources of acidic contamination (such as manila file folders and regular cardboard boxes), there is a drop in the amount of immediately available chemicals which accelerate deterioration.

When rehousing records, the physical condition of those records sometimes requires special or additional enclosures. Documents which are too fragile to be safely stored and retrieved in acid-free folders may be further protected by polyester folders (similar in design to manila folders) called mylar processing folders. Such folders are used in addition to acid-free file folders and may be purchased from a conservation supply house or prepared in-house. For fragile bound material, polyester book jackets (called wrappers) or special book boxes (called phaseboxes) may be prepared.

Examples of conservation treatments which may become part of an in-house program after some training:

The preparation of polyester book wrappers or phaseboxes mentioned above is a skill which may easily be learned in a workshop setting.

Removal of surface dirt, referred to as drycleaning, is another procedure which may be included among in-house

treatments after some instruction from a conservation specialist. Likewise, mending with archival heat-set tissue is a skill which is often considered an appropriate in-house technique. Both of these techniques need to be developed on practice material before being applied to valuable records.

Regarding mending, it cannot be overemphasized that pressure-sensitive tape mending of any permanently valuable record should never be done! Even so-called "archival" tapes should be avoided. The only exception to this rule is mending tears in material which will be discarded after copying or filming.

Humidification and flattening of documents may also become part of an in-house conservation program. It is important, however, to have a clear idea of how and where the flattened material will be stored. No documents, especially oversize documents, should be flattened unless they can be safely stored in the flat format.

As mentioned earlier in this section, invasive treatments (those procedures which chemically alter the item being treated), such as washing, deacidification or pressure-sensitive tape removal, as a rule, should not be undertaken by those without significant conservation training.

APPENDIX

Cleaning Procedures for Records Areas
Conservation Resources

CLEANING PROCEDURES FOR RECORDS AREAS

Effective housekeeping procedures for records areas produce significant results at little cost. Standard cleaning practices should routinely be applied to vaults and records storage areas. By keeping dust and dirt to a minimum, the adverse effects they have on records will be reduced.

1. Vacuuming

Surface dirt and dust should be removed by vacuuming. Sweeping tends to put much of the dust into the air and it resettles later. Vacuuming with a soft brush attachment usually works the best for books, boxes and shelving. Vacuuming under shelves is also recommended.

When vacuuming a book, hold the book tightly closed while vacuuming the covers and edges. This will prevent dirt from being pushed into the textblock.

When vacuuming fragile materials, reduce the amount of suction. For vacuum cleaners which do not have variable suction, this may be accomplished by drilling one or more holes in the solid part of the attachment or hose. Suction then is varied by covering and uncovering these holes with a piece of rubber or plastic.

If there is concern about vacuuming up small pieces which should be saved for later reattachment, the brush should be covered with a layer or two of cheesecloth. The cheesecloth should be changed when it becomes clogged or dirty.

2. Dusting

When dusting books, hold them the same way as for vacuuming. Depending on the amount and nature of the dirt, most books are more efficiently vacuumed.

Spray cleaners used with dusting (such as Endust, etc.) should not be sprayed directly on materials being dusted. An alternative is to spray a small amount of such products on the dusting cloth, wait until the product vehicle evaporates (usually no longer than thirty seconds) and then use the "treated" dustcloth. Commercially treated cloths are also available. Spraying dusting products directly, even on shelves, usually leaves an oily film which tends to attract and hold dirt.

3. Washing

Commercial cleaners are safe to use on floors and shelves. First remove volumes, boxes and documents from the shelves and floors being cleaned. Wait until surfaces have dried and all fumes have dissipated (especially ammonia) before replacing materials back into storage areas.

CONSERVATION RESOURCES

Below is a list of conservation resources available to Massachusetts public records officers. Inclusion required the recommendation of at least two professionals in the field. The list is not exhaustive and will be updated as required.

Since this list represents a variety of skills and expertise, the State Archives encourages records managers obtain two estimates and treatment proposals before any conservation projects are undertaken.

The Conservation Laboratory of the Massachusetts State Archives is unable to accept materials requiring conservation treatment from municipalities. Other information may be obtained by contacting the Records Management Team at (617) 727-2816.

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617/725-8044
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Information

Resources

SUPERVISOR OF PUBLIC RECORDS
Municipal Records Management Manual

INFORMATION RESOURCES

The Records Management Unit of the Secretary of State's Office, Archives Division, is always available for advice and technical assistance regarding records management questions. Below is a select list of other information resources which may be helpful in the development of a municipal records management program.

A. BOOKS AND ARTICLES

Benedon, William: Records Management (Englewood Cliffs, N.J.: Prentice-Hall, 1969).

Dearstyne, Bruce W.: The Management of Local Government Records, A Guide for Local Officials (Nashville, Tennessee: American Association for State and Local History, 1988).

Evans, Frank B.: Modern Archives and Manuscripts: A Select Bibliography (Chicago: Society of American Archivists, 1975).

Institute of Certified Records Managers, "Bibliography for Certified Records Managers," in Preparing for the CRM Examination, A Handbook (for more information, write to the Institute at P.O. Box 8188, Prairie Village, KS 66208.

Jones, H.G.: Local Government Records: An Introduction to Their Management, Preservation and Use (Nashville: American Association of State and Local History, 1980).

Leach, Douglas Edwards: "Early Town Records of New England as Historical Sources," The American Archivist, vol. 25, no. 2 (April, 1962), pp 173-181.

Pederson, Ann, ed.: Keeping Archives (Sydney, Australia: Australian Society of Archives, Inc. 1987).

Smith, Milburn D., III: Information and Records Management (New York: Quorum Books, 1986).

Society of American Archivists Basic Manual Series on Archives and Manuscripts (Chicago: SAA):

Brichford, Maynard J.: Appraisal and Accessioning (1977).

Fleckner, John A.: Surveys (1977).

Gracy, David B. III: Arrangement and Description (1977).

Sung, Carolyn Hoover: Reprography (1982).

Walch, Timothy: Security (1977).

B. PROFESSIONAL ORGANIZATIONS

Association for Information and Image Management (AIIM), 1100 Wayne Avenue, Silver Spring, MD 20910, (301) 587-8202. Founded in 1943 to promote the growth of the micrographics industry, AIIM holds an annual conference and exposition, local meetings and seminars. It maintains a Resource Center to provide access to current and relevant resource material in the field of micrographics, and develops standards. Publications include Journal of Micrographics, Guide to Micrographic Equipment (an illustrated directory providing specifications, prices and pictures of currently available micrographic equipment, published every three years with yearly supplements), textbooks and consumer pamphlets.

Association of Records Managers and Administrators (ARMA), 4200 Somerset Drive, Suite 215, Prairie Village, KA 66208, (913) 341-3808. ARMA is a management association whose objectives are "to promote a scientific interest in records and information management; to provide a forum for research and the exchange of ideas and knowledge; to foster professionalism; to develop and promulgate workable standards and practices; and to furnish a source of records and information guidance. Publications include Records Management Quarterly and a monthly newsletter.

International Institute of Municipal Clerks (IIMC) 160 North Altadena Drive, Pasadena, CA, 91107. IIMC seeks to improve the administration of state, provincial, county and local government through education of municipal clerks. One of their objectives is to conduct research to increase the efficacy of the methods and procedures of that office. IIMC has an active Records Management Committee which carries out surveys and research, and produces technical bulletins on a variety of topics including disposition, files management and automation. IIMC has an annual conference and publishes a newsletter.

National Association of Government Archives and Records Administrators (NAGARA), c/o Dr. Bruce Dearstyne, Executive Director, New York State Archives, Albany, NY 12230, (518) 473-8037. NAGARA, an association of archivists, records managers and administrators, is an adjunct organization of the Council of State Governments. Its focus, however, extends to the management of federal, municipal, county and other local records. NAGARA holds an annual meeting, sponsors research in the area of archives and records management and publishes Clearinghouse, a newsletter on government records.

National Information Center for Local Government Records (NICLOG), 172 Second Avenue, North, Suite 102, Nashville, TN 3720, (615) 255-2971. NICLOG is a "consortium of professional and public administration associations interested in improving the efficiency of local government record-keeping and preserving essential sources of history." NICLOG offers publications and seminars and serves as a clearinghouse of information about records.

New England Archivists (NEA). The stated goal of NEA is "to promote cooperation among individuals and institutions in New England having original records in their custody, and those in related situations having an interest in such records." NEA sponsors two conferences per year whose papers frequently deal with municipal records. NEA publishes a newsletter four times per year. For further information contact the State Archives at (617) 727-2816.

Society of American Archivists (SAA), 600 S. Federal, Suite 504, Chicago, IL 60605, (312) 922-0140. SAA is a nationwide organization with membership from throughout the world. Founded in 1936 it is "a professional association of individuals and institutions interested in the preservation and use of archives, manuscripts and current records as well as machine-readable records, sound recordings, photographs, film and maps." It sponsors an extensive publications program which includes the quarterly journal American Archivist, a bimonthly newsletter, a manual series and full length archival works. Further, it sponsors annual meetings, workshops, professional affinity groups; promotes professional training and education; offers a placement service; and supports research dealing with archival problems.

